

ness that we are sensitive of the which this floor supports. We then plan our resource allocation as to the concept of "teaching universities, obviously. But Swinerton-Dyer's strong in teaching only departments is anathema."

DON'S
DIARY

MONDAY

Up bedtime, not unconnected with necessity of children and wife getting to respective schools, if on different sides of the desk, by 8.45. Deposited at university (conveniently en route) as usual at crack of dawn, in good time for my class, which is not until four this afternoon. Write memos for most of morning, many of them asking for money; also references for highly competitive final-year students, all of whom seem to want to be international bankers.

Lunch in student cafeteria (staff club went with cuts) on regular Monday curry, not all of which is recognizable. Afternoon of preparation, including consultation and joint marking of first-year approximate German.

Class at four is on popular music. This is a sideline, since the music department is a bit disapproving, and the course is taught therefore by local specialists in education and medieval German literature. Lecture on early blues well received. Back to other building for play rehearsal, which will be a *leitmotiv* this week and the reason for relatively few classes (I shall pay for it next week!). Stay in for evening meal, and then with friend and (female) research student to excellent concert by Dutch Swing College Band, who play a form of music scored by my family and also, apparently, by everyone under 40, except their new trombonist, who looks about 14, and my research student, who is widely assumed to be my daughter, thus pushing me further into the geriatric league.

TUESDAY

Teaching, mostly. Toller's *Hinkemann*, a gruesome little number, followed by necessary coffee. Give back language work. Lecture on *Ludwigskrieg*.

Lunch (see *Hinkemann*, above), then technical rehearsal. The play is Frisch's *Andorra*, in German, the whole thing an annual do welcomed by local schools and German-speakers, by the students who like working that closely with staff, and by the *Lektoria* - who gets to bully everyone, with justification. Me, I have reservations. Most of my staff involved, managing, prompting or acting, one with a non-speaking part, another with an occasionally non-speaking part because he hasn't learnt his lines. Rehearsal a shambles. Assure ourselves they always are. It lasts about seven hours (with tea break).

WEDNESDAY

People seem to want to see me all morning, mostly about going to Germany for a semester. Try and organize papers for staff meeting. Final coffee and worry about dress rehearsal.

I play a Catholic priest and have borrowed a soutane from chaplain, who is tall and thin. I was never the former and haven't been the latter for forty years. Buy safety pins and breathe in a lot. I also have a shambles and a ston, which I shall have to keep in sight permanently. Last year we had some props stolen and I don't know what this galling replacement rate is for a shambles.

Rehearsal takes eight hours (with tea break in make-up). Colleagues

still doesn't know lines and silent colleague looks like Groucho Marx when made up. Practise for first time pushing ancient bike on to stage. So far I have only pretended, feeling very foolish.

Bicycle turns out to belong to American student, who has also provided a rather sexy black dress for another member of cast. Wonder pruriently how she rides one while wearing the other, since bike has crossbar and can't (thank God) be ridden in a soutane, either. The lady herself (a member of the pop music class) evinces no surprise to meet her blues lecturer wearing soutane and lipstick, mummifying German to himself. Rehearsal a shambles. Back to the clichés for comfort.

THURSDAY

Old High German class less than successful, since most of class are in the play and preoccupied. Last minute run (*recite* limp) through in the afternoon. First night to be attended by director of Goethe-Institut, friend and patron. Pity he can't come tomorrow.

Unsure whether state of bowels due to excess of nerves or excess of cafeteria. Worry about making exit from studio theatre stage, turning right and landing on main stage. Will the English National Dance lot relish a cycling priest in a skin-tight soutane?

Performance sort of OK. Wonder at half-time if prompter should just read scene eight and save time. We lose three pages by slip, or skip, on part of leading man. Possibly in effort to compensate I further the cause of amateurism by losing thread of speech and reverting to earlier one, creating a loop and potentially prolonging the play indefinitely. Prompter jogs needle. Not bad, we tell ourselves, but prompter is twitching a lot.

Pity about the sound effects. Cats miaow and bells ring long after they have been noted on stage. Clichés running out a bit.

FRIDAY

Exhausted. Arrive back at 11.30 last night, to panic of wife, not for well being, but because she is taking a class to the play today, and thought it went on for five hours. Nine o'clock class less than sparkling on my part, but students OK, even though they all seem to have been at a party till three. More nerves and I try to get 10 minutes desk-top sleep, during which I am interrupted five times. Give up idea.

Afternoon performance gets adrenalin going again, as well as bowels, and by now the play is working well. Schools' audiences are different. Understanding less, they watch your lack of stagecraft like hawks. Remember lines, but nearly fall over. Soutane. Most of us know lines by now and those who don't resort to desperation measures like sticking them on to newspapers they are supposedly reading. Works like security blanket and no one fluffs.

Evening performance just as good and we even have a video of it. The camera was thrust into the hands of aforesaid research student at half-an-hour's notice, with rudimentary instructions and my children to help her. We watch some of it immediately after performance. My impression: down-on-the-knees, don't-fall-over-the-bloody-soutane, this-time speech is too dark and comes out like Jason preaching "mummy". But *excellent* coming to great applause and relief. One second-year performer is not so much trembling after her scene as vibrating. But leading lady (excellent and also second-year) is already on about next year's play. I change subject.

Brian Murdoch

The author is head of the German department at Stirling University.

Union miners row revived

by David Jobbins

University lecturers face a potentially damaging revival of the bitter row over their union's financial support for striking miners.

A motion to the summer council of the Association of University Teachers, which takes place in Glasgow next month, calls on the union leadership to make a £10,000 donation to relieve hardship among miners who supported the 11-month strike and their families.

The AUT has been split over its backing for the National Union of Mineworkers since its executive successfully proposed a £1,000 donation for hardship relief a year ago.

The donation and other AUT members who felt the union should stay out of what many regarded as a politically-motivated dispute, and the numbers of resignations blamed on the way the decision was made caused

considerable concern among the union leadership.

Before Christmas the executive persuaded the AUT council in York to reject a call from the University of London Computer Centre branch for a £5,000 interest free loan to the NUM, and treasurer Dr Tom Halsall warned delegates that further donations might meet a successful challenge in the courts.

But the ULCC, which is rapidly assuming the mantle of the most left-wing branch in the AUT, has tabled the demand for a £10,000 donation coupled with calls for the "immediate and unconditional" release of all jailed striking miners, the reinstatement of all strikers, and dropping of all charges.

The motion salutes the miners' "heroic struggle", accuses the TUC general council of betraying their cause, and says the fight will go on.

"The restoration of the right strength of the NUM is... essential," it says.

Many delegates, despite their sympathies with the NUM's cause, are to be horrified at the ULCC's attempt to reopen the NUM's attack on the Newcastle local association.

Many AUT members are worried that donations to the NUM may have been unconstitutional, according to the Newcastle local association, which wants union leaders to consider the rules to make clearer the distinction between payment in aid of the AUT's general aims and extraordinary spending which is regarded as better met from local funds.

The council is likely to be dominated by the issues of salaries, with support from the union leadership on growing centralization of the university system and the moves towards selective funding also high on the agenda.

Knight attacks NAB policy on polys

by Karen Gold

The National Advisory Body has no policy for public sector higher education, because it is refusing to recognize that the system must be planned on institutions and not course by course. Dr Peter Knight, director-designate of Birmingham Polytechnic and a former member of the NAB board has said.

He told the Association of Polytechnic Administrators' annual conference it was fatuous to treat all institutions the same, because they were not all in the same position. "Some institutions may be in the position of saying 'We can't increase student numbers, we are at capacity. Other institutions may be perfectly prepared to say, if the question were asked, 'We can take additional student numbers but what marginal costs are you prepared to pay?'"

"Different institutions are in different positions. But as long as the NAB fails to have an institutional policy, it isn't going to be able to deal in anything but artificial formulas. The polytechnics were more expensive than colleges to run because



Dr Knight appraisal needed

Government policy had dictated that expensive courses and machinery should be concentrated in them, he said. All the NAB had to do was recognize that, and then ask itself or the Secretary of State what proportion of resources should be devoted to them by 1987/88, the years of the next major planning exercise.

"What won't happen in 1987/88, because politically it would be too

damaging, is for a significant reduction in the amount of money going to the polytechnics," he said.

"If NAB came out and said now each polytechnic 'we won't be reducing the unit of resource in the poly cut will be taken elsewhere', which is what will happen - the poly would be able to plan on a sensible basis and so would the rest of the system."

A reappraisal of policy to polytechnics was necessary, and should be in the forthcoming Government Green Paper on higher education, he said. It needed to be a reaffirmation of the policies which had set them up: prestige institutions with mix of levels and subjects of work.

But the polytechnics bidding for university status, particularly those which had not stuck to the policy of mix of levels and provision for part-time students, should not be allowed to state those colleges which had followed Government policy would be the ones to be rewarded, and that who had followed Government policy were the ones to be punished.

Joint effort to aid industry

A joint technology centre, featuring representatives from Newcastle University, Newcastle Polytechnic, Sunderland Polytechnic and local authorities, is to be set up to help the growth of industry in the North East.

The £375,000 scheme, which was planned by local trade and industry officials, will help firms to gain easier access to the technical resources of the three academic institutions. The centre will identify new business opportunities with individual companies, and help them to plan projects.

The centre will also help and advise the academic institutions on translating relevant areas of research into commercial developments, in the form of new products or technical services to industry.

Mr Richard Tomlin, assistant registrar at Newcastle University, said:

School-leavers encouraged to do sandwich year at work

Representatives of industry and education are to be brought together by the Government for a seminar to explore ways of encouraging more school-leavers to take a break before going on to higher education.

Mr Peter Brooke, under secretary for higher education, stressed the Government's support for young people spending a year in work or other experience between studies in a speech this week at the conference of registrars and secretaries of UK universities in Bradford.

He laid most stress on the universities because of the high proportion of mature students in the polytechnics. "I wonder whether the universities might not consider whether to adopt a general preference for those seeking deferred entry or who have already spent a year away," said Mr Brooke.

At the very least, think admissions tutors might in some cases suggest to applicants the positive benefits of other experience and help create a climate in which applying students should not feel inhibited about requesting deferred entry, indeed

perhaps by making it a condition of acceptance where appropriate. Mr Brooke suggested closer links between education authorities and industry as one means of encouraging "the gap" for 18-year-olds.

Some progress was being made already through periods of work experience for students with employers sponsoring their higher education, and through the Youth Training Scheme.

The broadening of students' experience would have advantages for employers, higher education institutions and the students themselves, he said. Employers would welcome a widening of horizons beyond education, the institutions would see better motivated students and the students themselves would be more mature and have a clearer idea of how their studies matched the needs of the world.

Mr Brooke said he hoped to expect that parental cooperation would be forthcoming, provided that parents appreciated that their children were going to spend their years in a constructive and stimulating way.

Training for change demanded

Failure to attach a higher priority to staff development could jeopardize the Government's own plans to revitalize education and training, according to the college lecturers' union.

In a discussion paper the National Association of Teachers in Further and Higher Education says that the post-16 education system is having to meet radical new demands largely from existing staff.

Complaining that insufficient effort has been given to staff development to equip lecturers to meet the changing demands, Natfhe says that all teachers in further and higher education should have the right to opportunities for professional updating, improvement of qualifications, career development and personal research.

This should take the form of subject updating, professional refresher courses and training to meet new curricular and managerial demands, Natfhe argues. These common needs are not met by the current "patchwork" of staff development provision, nor can it be justified on value for money grounds.

"Within this broad framework special attention must be given to the broad range of teaching staff who carry the main responsibility for innovation, development and implementation of new courses," the union says.

And it calls for the establishment of national steering groups including the Government departments involved in funding and directing inservice training to produce a coordinated national approach.

I would include the Department of Education and Science, the Department of Employment, the Manpower Services Commission, education authority and professional teacher representatives.

Natfhe, which hopes that the local authorities will adopt the proposal in their annual review of non-advanced further education, believes the steering group should develop a programme which would subsume existing programmes in both further and higher education, and place it under machinery which would enable institutions to develop a staff development strategy for all their staff.

The proposed body is particularly necessary in order to coordinate the separate funding sources and initiatives in non-advanced further education, Natfhe says.

Although in the first instance it would be primarily concerned with NAB, it would also need to liaise with the National Advisory Body for public sector higher education and other bodies in advanced further education.

Higher education has particular problems over staff development, the union believes. In polytechnics and colleges lecturers are even less likely to have undertaken initial teacher training than their colleagues in the further education colleges.

While validating bodies have reduced research activities, the pressures of economies over recent years have diminished the opportunities for lecturers to undertake them or other activities such as consultancy work and visiting experience.

The union contrasts the relative lack of resources for research in the public sector compared with the universities and calls for more while insisting they should not be provided at the expense of teaching.

Staff development units in the polytechnics and fewer number of higher education institutions had generally proved their worth despite the tendency to regard them as of secondary importance to the maintenance of teaching posts when imposing cuts.

"This is clearly a short term expedient forced on institutions which can only undermine their capacity to meet changing needs in the future," Natfhe says.

Centre for blind

The Royal Home Secretary Mr Meriel Rees has officially opened Britain's first centre for recording study materials for blind students. The facility, at the National Institute for the Blind's study centre library, which provides a specialist service of recorded materials,

Natfhe attack over wide front

by David Jobbins

Widespread dissatisfaction with key policy trends across the whole spectrum of public sector further and higher education is expected to surface at the annual conference of the main lecturers' union next month.

Because of a range of uncertainties over policy issues, leaders of the National Association of Teachers in Further and Higher Education hope that the steering committee governing the Plymouth conference will adopt a flexible attitude to the agenda.

But delegates are already scheduled to discuss:

● An attack on plans to concentrate some areas of higher education in larger institutions.

● A withdrawal of cooperation with the Business and Technician Education Council.

● A campaign for withdrawal of support for the Youth Training Scheme if supplementary benefit is withdrawn for young people who refuse a place.

The anxieties span the union's membership from the polytechnics to the further education colleges, and from specialist areas such as art and design education to the operation of Manpower Services Commission schemes.

And it overlays the threat to disruption in the colleges posed by the union's dispute with the local authority employers and the Department of

Education and Science over this year's salary claim.

Perhaps the most important motion tabled for debate on higher education deals with the National Advisory Body. While congratulating its representatives on the NAB for their "relative" success in defending the union's objectives, the motion expresses opposition to the imposition of a 12:1 staffing ratio.

It claims that this policy is already placing severe strains on the system and warns that it will further damage the quality of education provided.

Prompted largely by the union's art and design education standing committee, the motion goes on to attack the trend towards concentrating teaching in areas such as art and education in the larger institutions.

It expresses particular concern at the concept of "critical mass", which it says is being fostered by Her Majesty's Inspectorate and the NAB as a planning tool.

"This concept, borrowed inappropriately from nuclear physics, is potentially dangerous especially for small specialist institutions like colleges of art, design, drama and music."

Critical mass is just one of a number of the NAB's activities described in the motion as direct threats to the current diversified nature of advanced further education. Others include the classification of institutions, transitory and other special reviews and the earmarking of funding within the capped pool.

"Diversified AFE provision, broadly similar to the current situation, is a basic tenet of Natfhe's position in the NAB," it says.

More specific is the demand from the union's largest region, the north west, for an immediate withdrawal of cooperation from the ETIC because of its failure to acknowledge the need for adequate remuneration to enable lecturers to cope with the extra work derived from its procedures.

Equally the direct attack on the YTS has switched from its inadequacies and the activities of cowboy operators to the issue of compulsion.

Implementation of any proposal to deny supplementary benefit to people who refuse places should be automatically followed by a campaign within the Trades Union Congress for withdrawal of all support from the YTS, according to the East Anglia region.

More dramatically the south-east region calls for outright opposition and warns of an erosion of standards in the YTS.

A further attempt will be made at the conference to introduce a code of professional conduct covering racism and sexism, disputes between members and relationships with other trade unions.

Another UCCA record

by John O'Leary

Another record number of applications for university places is expected this year, thanks to increased demand from women and overseas students. The latest survey by the Universities Central Council on Admissions shows almost static demand from British candidates, while overseas applications continue their recovery started in 1983. By the end of March, more than 17,000 people had applied from abroad, compared with fewer than 16,000 at the same time last year.

A statement from UCCA forecasts a final total of 176,000 candidates, some 2,000 more than last year's record figure. The council drew attention to the continuation of the trend towards more participation by women, which more than offset a decline in applications from British men.

The most popular subjects by far are law and medicine, both of which had attracted about 10,000 applicants by the end of last month. Next came English and business and management studies, both of which had drawn 6,400 applications, followed by economics combined with engineering, history and computer studies.

This year for the first time all universities except Buckingham and the Open University are included in the UCCA scheme. Glasgow and Strathclyde have joined since last year and the former Ulster Polytechnic courses have been added to the University of Ulster courses previously run on the Coleraine campus. UCCA estimates that its volume of applications would have dropped slightly this year if these changes had not taken place.

Scots lecturers move to merger

The Association of Lecturers in Scottish Central Institutions has begun moves towards a merger with Scotland's biggest teaching union, the Educational Institute of Scotland.

ALSCI's council is recommending approval of a merger in an advisory ballot of its 650 members. The results are expected in time for an EIS council meeting next Friday.

The merger proposal would maintain ALSCI as a self-governing association within the EIS, as is currently the case with the Institute's Further Education Lecturers' National Section.

If the proposals are accepted, around 350 FELNS members would join ALSCI when Napier and Glasgow Colleges of Technology, currently local authority further education colleges, become central institutions this autumn.

The ballot results will be considered by ALSCI's council at the end of May, and if the majority of members favour the merger, a formal ballot will be held in June.

THE
SIS

Innocence abroad...

Proof that the new celibacy has obliterated the swinging sixties. American students on their year abroad at St Andrews University have drawn up a "disorientational manual": a guide to the peculiarities of British behaviour their successor compatriots might expect.

The section on Awkward Social Situations begins: "As a noble young American co-ed, the male at your dinner table asks you to his room for a cup of coffee. You say: 'Sure, mack, and ya wanna show me your etchings too, huh? Buzz off.'"

No, no, says the guide. Things are not what they seem: "In Britain, an invitation to coffee will only result in a hot cup of cheap instant and a chance to talk."

Meanwhile student pregnancies are causing concern to parents in Swaziland, the prime minister, Prince Bhekimpi, noted recently. He told a political meeting that worried parents should campaign for a new law, to prevent unwarranted mothers-and-fathers-to-be from continuing their education. The young people could then, the prime minister said, be sent home, to get married.

The Lindop larks

Members of the Lindop committee, whose report is due to be published next week, deserve E for effort at least. Halfway through the spring weekend in an Oxfordshire hotel where the report was hammered out, the super-select committee on standards realized there was likely to be considerable scrutiny of its own.

The report had better be properly written, members decided. So on the Sunday morning the committee - Dame Mary Warnock, Sir Alex Morrison, Professor Geoffrey Elton *et al.* - and his hapless civil servants were up, dressed, breakfasted and at their desks, pens poised for work, at the unearthly hour of 7.30 am.

Fruit and nut case

Scores of teenagers spent a day this week devising ways of splitting up the ingredients of muesli. This nut-picking exercise was thought up by, believe it or not, the British Association for the Advancement of Science.

The BAA's 1985 "Ideas into action" young scientists' brief was to "develop a prototype machine illustrating some basic principles of separating constituents of a muesli-like breakfast cereal, using their design, technology and other inventive skills." The prizes for the most ingenious ways of separating wheat from oats (most people just pick out the raisins) were presented by Sir Keith Joseph. The venue was London Zoo. Whatever will these humans think of next?

Wrong track

A little help for British Rail investigators, tracking down the 25 polytechnic administrators who travelled without paying their fares on the 22.35 from Brighton to Falmour.

The very wrong of breath. They had been in the pub. They thought they had lost their kilt. They didn't know the station was closed. Lots of them had Geordie accents.

Their names were... maybe not. After all, one of the reasons they had to catch the train back to Brighton Polytechnic and their annual conference was that coaches booked to pick them up from the poly were all waiting - across the road in Sussex University.



Making faces: an international conference on the meaning of faces is to be held in Cardiff from June 26 to June 28. More than 100 academics and writers are expected to attend the conference which is being arranged by the Welsh branch of the British Psychological Society. Topics will include: the face in art; telling character from faces; the face in the theatre; how we assess emotion in faces; and how we think we look.

Aberdeen to be animal rights rally target

by Olga Wojtas

Scottish Representative Scottish animal rights activists are to centre their annual rally on Aberdeen University tomorrow.

A number of groups coordinated by the Scottish Animal Rights Network will lay wreaths in memory of dead animals at three alleged vivisection laboratories at the university, beginning a week of action to mark world day for laboratory animals on April 24.

One wreath will be laid at the university's Marischal College, where a year ago members of Aberdeen Animal Rights Group say they found dustbins containing more than 120 dead animals, including a rabbit with wires coming out of its neck and a decapitated guinea pig.

The groups will also lay wreaths at the animal house at Aberdeen medical school, which they say contains some

6,000 small animals, and at the psychology department.

Mr Richard Beggs, chairman of Aberdeen Animal Rights Group, claimed that Professor Eric Salzen, head of the psychology department, had a colony of 40 squirrel monkeys, some of which had had electrodes implanted in their skulls. "The animal house is sealed off and even the porters have not been in," he said.

The group also alleges that Professor Cecil Kidd of the physiology department, who came to Aberdeen in conducting experiments on 11 cats.

"The whole scene is cloak and dagger stuff behind closed doors," said Mr Michael Deveria, the Aberdeen group's co-chairman.

Professor Salzen refused to comment on the group's claims, but said: "It is a normal perfectly regulated animal house."

Cambridge teaching surveyed

A survey has been carried out among Cambridge University students to find out what they think of teaching methods and attitudes throughout the university.

The poll, commissioned by the students' union, aims to establish how useful students find Cambridge's traditional supervision/lecture system for teaching and how the system could be improved. It follows numerous complaints about inadequate supervising.

The union's deputy president, Mr Martin Todd, said: "We are asking a whole series of questions, including what the content of courses and how useful students find lectures. There has been a lot of dissatisfaction about standards of teaching."

Mr Todd said the union had received about 1,500 returns from the survey, which were being put through a computer to find the conclusions by the summer term. But early returns show that students are unhappy about the undue emphasis placed on supervising, and the complacent attitudes of many supervisors.

Many students, particularly in the arts areas, also find lectures a waste of time because of poorly developed teaching skills among lecturers.

"Eventually, we want to use the findings of the survey to help mount a campaign for proper lecturer training, and to improve the quality of the courses," said Mr Todd.



Coming to a predictable conclusion

"Universities have to take into account short term external factors... such as the government of the day." Thus the Jarratt report was introduced to a delegation of the National Union of Students in superb Humphrey Appley's parlour.

The findings of the report, of course, should not surprise anyone. A report by the vice chancellors with other vice chancellors for the vice chancellors which concluded that vice chancellors should have more power is perhaps not too cynical a view.

It would be too much of a kneejerk reaction and irresponsibly defensive, however, to suggest that it was a complete waste of money. From a pragmatic point of view, I would much sooner have a Committee of Vice Chancellors and Principals report than a Department of Education and Science or even Audit Commission review.

At least the Jarratt members have an understanding of the aims of the universities. That understanding recognizes that in a large part, no one knows nor can know what the object is of a university. "Teaching to promote the general powers of the mind?" "The advancement of learning?" These are themselves the subject of important discussions, but it seems to be tautological that the product of the advancement of learning is presently unknown.

The Jarratt report has rather a different view. It is a report on the state of the universities, providing for those objectives. As the objective is wholly admirable (it increases the total effort for the advancement of learning) it is not surprising that I find myself agreeing in large part with the premises of the report.

It is certainly the case that some universities have failed to keep up strategically. How many, for example, were caught completely off-guard in July, 1982? It would seem commonsense that financial decision makers should be accountable for their decisions. Likewise, no academic strategy can be pursued separately from a financial strategy if it is to be successful.

As ever it is not the premise which is the subject of politics. It is the conclusions. And it is the conclusions that I find difficult with. Its key recommendation for the universities, of diminishing democracy in non-academic areas, is misguided. For example, its objective of decreasing local education authority input in favour of business fails to explain why or how this increases efficiency. "Non academic" functions within universities are as equally important as traditional academic ones. Likewise they contribute equally and interrelate to the academic objectives of higher education.

A university cannot be run purely from the top down just as it cannot from purely the bottom up. Comparisons with industry are ridiculous when taken to the extreme. What motivates efficiency is agreement and commitment to strategic purposes not exclusion or piecemeal downs. University faculties should not be production lines, nor students units of production.

Democracy within universities, when it becomes self-interest, is inefficient. Autocracy with self-interest is disastrous. Efficiency comes to academia when accountability to the people is increased. That is why the public sector, in many cases, does as good a job with less money.

Phil Woolas

The author is president of the National Union of Students.

Nurses' training switch urged

by Maggie Richards

A radical plan to switch the present hospital-based education of nurses to higher education is outlined this week in a major report on training from the Royal College of Nursing.

Describing current training facilities as generating an educational environment "reminiscent of a 19th-century teachers' training college", the RCN report claims they are also too costly and wasteful.

The report urges the wholesale separation of training from the National Health Service, with selected hospital schools becoming an integral part of polytechnics and colleges of higher education. This move, it suggests, would eliminate the current practice of using students as a cheap addition to the workforce.

The report recommends the creation of a nationwide three year programme of studies, beginning with a one-year foundation course, and progressing to a second year incorporating practical work, with a final year of more specialized studies. The programme would lead to the award of a new Diploma in Nursing Studies, to be validated by the Council for National Academic Awards.

Universities would be encouraged to continue their present commitments to undergraduate courses in nursing, and

the report envisages that once established, the new system of training will have 5 per cent degree sector and a 95 per cent diploma sector.

The new qualification would also allow the possibility of organizing extended courses for part-time and mature students, and open up opportunities for additional qualifications through continuing education programmes.

The report anticipates that five O level passes will become the minimum qualification for entry to the new diploma course, but that most of the post-school entrants may hold up to two A level awards.

On the cost of the new system, the RCN is confident it will prove to be considerably less than present training costs. A study commissioned from the Centre for Health Economics at York University suggests the proposed diploma would amount to only two thirds of the cost of putting a student through the current training process.

Only the unsatisfactory practice of using students as part of the workforce currently offsets the high price of training, it adds.

To finance the students through higher education, the report favours a system of bursaries to replace present pay structures.

It argues strongly against adoption

of mandatory grants. "Nursing students, if the reality of clinical engagements is to be effectively maintained, will be required to work and study for longer hours and a greater part of the year than other students, and will effectively be debarred from seeking vacation employment."

The report warns that current training procedures cannot continue for much longer without a drastic drop in the number of qualified nursing staff, and it points to the current drop-out rate among students of 15 to 20 per cent as wasteful in public and personal terms.

Nurses have a right to an education which will equip them to question as well as to obey, to discover as well as to be taught, and to learn from others working alongside them in different academic areas, the report maintains.

Once the new training programme is implemented, the nation will benefit from a system "more effective in generating quality and less wasteful in consuming resources than the crumbling muddle which is now in place", the report declares.

The Education of Nurses: A New Dispensation. Published by the Royal College of Nursing, 20 Cavendish Square, London W1M 0AB.

Divinity merger alarm

by Olga Wojtas

The Church of Scotland has been alarmed by proposals from Edinburgh University that its divinity faculty merge with arts and music.

And it has warned that such a move would inevitably threaten the autonomy of faculties in Glasgow, Aberdeen and St Andrews.

The merger proposals come from an internal committee of the church's divinity faculty, which is responsible for training ministers for the Church of Scotland, and Rev Alasdair Morton, general secretary of the church's department of education, said there would be considerable concern if the vocational elements of the faculty's work were diluted.

"We would want to be sure that the training the university provides for our candidates to the ministry is safeguarded," he said.

The report states that it is concerned only with the university management and cannot comment on the academic arguments to support the separate identity of arts, divinity and music. It concludes that "small faculties do not make administrative sense".

But Mr Morton asked: "Is it possible to offer serious arguments for re-organising administration if functions are not examined as well?"

Professor James Mackay, dean of Edinburgh's divinity faculty, said he regretted that the report did not make it clearer that divinity, like law, prepared people for a specific profession.

But he said there could be an intention "to reduce the rich variety of academic opportunities" and that he report rightly stressed that management and administration existed to serve the university's primary goal of education.

Professor Mackay added: "The faculty here ranks in size and in prestige with Oxford and London, and since this is our Jarratt matter it might have even broader implications than just for Scotland."

The issue of merger was an open question at present, he said, but he was concerned by alternative proposals in the Edinburgh report that the grouping of arts, divinity and music should have a single representative on university committees if they did not amalgamate.

"Advice on academic policy must come directly and be seen to come directly from each of the groups."

But Professor Denys Harding, dean of the arts faculty, said it could be argued conversely that the smaller subject areas of music and divinity were given a disproportionate voice in university affairs because they had separate faculties.

On the issue of merger, he said: "From my point of view, I have no ambition to absorb either of these two faculties against their wish or better judgement. I would welcome the drawing in of music because I think that would strengthen arts academically, but I see they have independent activities which might make it administratively not so straightforward."

Edinburgh's Jarratt report has also suggested a similar merger between the faculties of law and social sciences, but Professor Neil MacCormick of the jurisprudence department, said he thought opinion in law was that no case had been made out in the report for such a move.

Political scientists 'are neglected'

by Karen Gold

Political science has become very largely an interest to be pursued by a small minority of consenting adults in private, according to Professor Trevor Smith, head of the department of political studies, Queen Mary College, London.

It had experienced neither the past popularity of sociology and economics, nor the current disillusion with those subjects, he told the Political Science Association annual conference at Manchester University.

But its low profile needed explanation. "How is it that a discipline engaged in the study of politics is itself so marginalised in its corporate role both within the academic community and in the world of public affairs?" he asked.

As a discipline, political science had gone through its own and so a less new identity than the subjects - law, philosophy, psychology - from which it borrows, he argued. Abroad that lack of definition had not prevented political scientists being more involved in public politics than in Britain, but in Britain there were now very few politically involved political scientists - "silence is equated with objectivity," he said.

British political scientists also suffered from a sense of inferiority, due to the late recognition of the subject and their disengagement with American scientists who had dominated its thinking, he said. That sense of inferiority was manifested in higher education by a reluctance to grant academic honours to political scientists.

"There are strong prima facie grounds for believing that the social sciences, and particularly political science, bestow far fewer honorary degrees on their distinguished members than do the disciplines of other faculties," he said.

"It is so much that universities are reluctant to grant recognition to political scientists as that political scientists show a marked reluctance to propose possible candidates for honours."

The current economic depression and its related political problems was both an opportunity for political science and a threat because of the worsening position of the social sciences in higher education.

But intellectually the political scientist was better placed, more internationally integrated, less eclectic and more politically involved, he said.

"For the latter we are indebted to Mrs Thatcher on two counts: first, the Government's expenditure cuts in higher education are forcing us to prepare a vocal defence of the discipline; while second, her supporters from within the profession - who would previously have denied that scholars *per se* have any public role to play in practical politics - now happily contribute to symposia and seminars whose avowed purpose is to sustain and develop the theoretical foundations of the New Conservatism."

Several universities are bidding to buy the Poetry Society's 11,000-volume library, which the society says it can no longer administer properly.

The library, worth more than £100,000, was established by the donations of many of the society's founding members in 1909, and has expanded considerably over the years to its present size.

Specializing particularly in Victorian works, the library contains volumes by most major poets, although it does not claim to be comprehensive. "There are quite a few gaps, but to be honest it is difficult to list where anything is," she said.

Academics at the University of Ulster are angry that staff aged under 50 who may be declared redundant will be entitled to only state redundancy pay.

But they have persuaded the Department of Education, Northern Ireland, to take up their case with the Treasury following a meeting between the Association of University Teachers and Mr Nicholas Scott, under-secretary of state for education in Northern Ireland.

Draft compensation terms for the university only published in March, would restrict payments to the state academic levels of about £2,000, considerably less than what is still available under the voluntary severance scheme funded by the University Grants Committee, which remains effective in Northern Ireland until September.

The staff at the university, which was formed last October from a merger of the New University of Ulster and Ulster Polytechnic, technically had until the end of March to decide to refuse an offer of employment. If they did so for reasons of reduced pay or changed conditions they could seek compensation through an industrial tribunal.

Self-assessment pack ready for unemployed

The first of the Open University learning packages for the adult unemployed under the Government's RE-ENTRY initiative has become available.

The self-assessment file contains about a person's own experience and the first of eight packs available for groups of individuals for a small fee.

Funding from the Department of Education and Science and Manpower Services Commission mean that only the postage and packaging costs are being charged to the student. The OU has developed the material through its community education unit on a non-profit-making basis.

Mrs Barbara Senior, leader of the course team, said the complete set of materials for the unemployed would be available by the beginning of next year.

"We will be able to make use of the OU's considerable publicity network and contacts to bring the materials to the attention of unemployed people," she said. The REPLAN field officers and their computer bank of contacts working with the unemployed will be used since Jobcentres cannot sell the materials.

The community education unit on a non-profit-making basis.

Where industry fails to make capital

by Olga Wojtas

Scottish Correspondent

Industry is not sufficiently exploiting Britain's strong science and engineering base in its universities, according to the president of the Confederation of British Industry.

Sir James Clesminson, addressing a meeting of academics, students and business people at Stirling University, said there was no reason why Britain should not be capable of a substantial increase in industrial output without inflationary stress, provided it fully developed the skills of its people and used all the available modern technology.

But innovation was already being held back by a shortage of trained people, and companies had to work more closely with those responsible for education and training at all stages.

There was a need to ensure before university level that the education system not only encouraged young

people to understand the importance of the creation of wealth, but also fostered their talents in a direction which ensured that this would be attainable, Sir James added.

Without the creation of wealth, the state would be unable to provide any of the services it did, including education itself.

"In Japan, a child knows that if he or she is to get a permanent job in industry, earning good money, they must succeed right through primary education to secondary education and university," Sir James said.

"In Germany young people apply themselves to a wide range of subjects in order to prepare themselves either for university or the very thorough training courses provided by industry. In America, most individuals have to find the resources for their own education and regard self advancement as their own responsibility, not the responsibility of the state."

"The best way of solving the problem now is to tap the pool of potential women science students," he said. "There are excellent career prospects in these areas for women."

St Andrews University this week held a conference aimed at alleviating the national shortage of information scientists, technologists and engineers.

The conference, attended by female science students and senior schoolgirls, follows the WISE (Women Into Science and Engineering) initiative launched last year by the Equal Opportunities Commission and the Engineering Council.

Mr Jack Daniels, St Andrews' senior careers adviser, who organized the conference in conjunction with Dr Clivia Sotomayer Torres of the physics department, said the country had "more or less exhausted the supply of males" who could be drawn into information science and technology and engineering.

"The best way of solving the problem now is to tap the pool of potential women science students," he said. "There are excellent career prospects in these areas for women."

Bath's French connection

Bath University is to set up a transnational centre in northern France to encourage business links between the two countries. The National Polytechnic of Lorraine will be formed by the university's company, South Western Industrial Research Ltd, with the help of a £20,000 grant from the EEC.

The scheme will help companies in both countries hire the services of people who can help tie up deals and solve problems at the negotiating stage, and give information on the availability of government grants.

Carry on voting

Glasgow University Graduates' Association has decided by two votes that it should not disband, despite a recommendation from its own committee that it should because of dwindling membership.

The 60 or so members of the 2,000-strong association who attended the special meeting voted to continue after hearing a telegram from a graduate in Canada urging the association to keep right on to the end of road. Ignore numbers. Never say die. Remember Battle of Britain and General Urquhart of Arnhem."

Training centre

A training centre for further education lectures has been opened at the North London College, Islington, by the Inner London Education Authority. The centre is to provide training and resources for almost 200 full and part-time staff at the college, for teachers from local schools, lecturers from the Polytechnic of North London and Islington employers who run youth training schemes.

Second sitting ...

The Secretary of State for Scotland, Mr George Younger, has reappointed Baroness Carnegie of Leven as chairman of the Scottish Community Education Council. The council was set up three years ago to promote and develop community education, including adult education and youth and community work.

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The community education unit on a non-profit-making basis.



Leicester Polytechnic's Dr Colin Muir has developed an alternative laboratory test for eye irritants to the ones which involve dripping sometimes painful material into rabbits' eyes. Dr Muir's test, funded by the Dr Hadwen Trust for Humane Research, involves using discarded cow tissue from the slaughterhouse so that no live animals are used or specially killed.

Survey shows value of MBA

Management graduates who go on to get a master's degree are likely to reap a rich reward in increased earnings, according to the findings of a new survey.

The Business Graduates Association, which promotes the status of management education and business schools, surveyed its members on the value of a Master of Business Administration degree.

Results showed that 25 per cent of MBA recipients doubled their salaries, while the average pay increase amounted to 67 per cent.

The survey, the first to investigate the value of an MBA degree, researched information on pay levels, the

impact of the MBA, and comparative rates of pay inside and outside the manufacturing industry.

It revealed an average salary of £16,849 in the 25 to 29 age group, and an average of £24,000 for those aged 45 to 49. Women's pay, however, fell £3,700 below the average for men.

"Perhaps the greatest indicator of the MBA degree's value is that only three of the respondents were unemployed," said Professor J. A. Kennerley, director of the association.

1985 BGA Salary Survey (Interim Report), published by the Business Graduates Association, 28 Margaret Street, London W1N 7LB. Price £5.

In September The Times Higher Education Supplement

published a 4-page analysis of the joint statement from the University Grants Committee and the National Advisory Body regarding the basis for considering the present and future role of higher education in our society.

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overseas news



Protecting academic quality

At the time of announcing university funding for the quinquennium 1985-1990 last December the Minister of Education announced that there was to be a review of the New Zealand university system. This arose partly because a general election had taken place giving rise to a change of government in the midst of the quinquennial negotiations.

The association of University Teachers of New Zealand has received assurances from the minister that the purpose of the review is to assess the overall level of funding needed in the light of the government's policies with respect to open entry to university, staff/student ratios and overseas students.

Indications are that the review will be undertaken in a positive manner and the association is among those groups which are being invited to make submissions on the matter to be considered.

The chairman of the University Grants Committee has just released a preliminary discussion paper relating to the review of the universities which reinforces many of the statements made by the association both to the present and previous administrations.

The chairman interprets the present definition of open entry, for example, as implying that all persons who are qualified to enter the university should be able to do so. The implication of this has been that the universities have expanded to meet demand rather than being held at predetermined levels with consequent competition for places. However, the universities have not been funded for staff in sufficient numbers to allow for the appropriate expansion to meet this demand and there has been a significant growth in the number of courses which have entry restrictions.

The association regards the issue of worsening staff/student ratios as being of paramount importance. In his discussion paper, the UGC chairman notes that while funding for the 1975-79 quinquennium was based on a staff/student ratio of 1:20.2, the actual ratio in 1979 was 1:11.5. By 1984, the figure was 1:13.7 because the universities were funded for increased staff at only half the level required to maintain staff/student ratios at the 1979 level. The additional removal of funding for 100 academic positions in 1982 means that the universities require an additional 273 academic staff in 1985 simply to return to the position of 1979 - a position which was acknowledged as being unsatisfactory.

The review of the system comes at a critical time, for the association is also engaged in making representations to the University Salaries Committee (which parallels the British Committee 'A') on our academic salaries. The New Zealand process is virtually frozen at its now four-year stage. The association contends that it is vital importance to our economy to maintain a thriving university system, as it is the universities' responsibility to provide a pool of qualified graduates in a wide range of professional disciplines together with more generally trained graduates able to take a future leadership role in the economic and social development of New Zealand.

Rob Crozier

The author is executive secretary of the Association of University Teachers of New Zealand.

Space training orbit widens

by Thomas Land

Many universities around the world are being drawn into a gigantic training scheme intended to give poor countries the qualified workforce they need to reap the benefits of space technology.

The project is supported by Britain, the western countries in the European Space Agency and their rivals in the Interkosmos Council of Eastern Europe. It is coordinated by the United Nations Development Programme with help from other development agencies.

It involves the establishment of regional remote-sensing training centres assisted by local universities and in cooperation with the foremost space research and training institutions in advanced countries.

The latest regional centre will soon be established in the Americas, modelled on a recently created Asian institution. The African training programme is currently upgraded and expanded.

Space technology could solve many pressing problems of the hungry world. Remote-sensing services can pinpoint subterranean water in arid regions, identify locust swarms and crop diseases and speed geological exploration. Direct broadcasting satel-

lites have opened up new vistas in rural education. Communication satellites can boost trade and provide navigational assistance to merchant fleets and aircraft. Meteorological satellites improve food production and transport safety by helping to predict the weather.

But most satellites are designed and operated by the rich countries essentially for their own benefit. Vital data on natural resources can be gathered and distributed without the consent or even the knowledge of the sensed countries. And a deluge of data from a remote-sensing satellite is quite useless in the absence of a properly trained core of specialists equipped to process, interpret and apply it.

A few developing countries - such as Argentina and Brazil, China and India - have made great sacrifices to keep up with the advance of space technology. But a specialist with the UNDP explained: "There is a limit as to how much catching-up they can do individually. Only by pooling their resources and capabilities can they really begin to bridge the training gap."

Preparatory assistance from the UNDP will result shortly in the establishment of the first regional remote-sensing training programme for Latin America. Its location is still the subject

of intense rivalry. In the end, it may well be based in Brazil and be supported by strong ties with the Instituto de Pesquisas Espaciais, which has already made available 10 long-range fellowships in remote-sensing. Or it could be set up in Argentina which also has remote-sensing ground facilities.

The Latin American project will draw on the experience of the recently established Asian Regional Remote-Sensing Training Centre in Bangkok. The expanding African regional programme is based in Bamako, Mali. It already runs five user-assistance training centres located in Cairo, Nairobi, Kinshasa, Elie-Ife in Nigeria and Ouagadougou. Mr. Adnan Abdou, a Nigerian space expert involved in the UN's training programme, commented: "Developing countries can learn from anywhere, but it is better to learn from those who have just made the same mistakes. It is best for developing countries to learn to crawl from countries which have just crawled."

In addition, the UN's Food and Agriculture Organization runs a remote-sensing space centre in Rome. During the past five years, the centre has trained 650 Third World professionals at various workshops and regional seminars.

Medical reforms scuppered

from Craig Charney

A strike by specialist interns in French hospitals appears to have delivered a coup de grace to the government's ambitious plans for the reform of medical education.

The strikers' demands concern pay for interns' work in hospitals. However, the settlement negotiated by Georges Dufoux, the Social Affairs Minister, after a five day stoppage, implies the end of official efforts to equalise the workload of specialists and general practitioners.

In response to the specialists' demands for an increase on their \$40 month pay, the authorities agreed to offer them a "bonus" of \$140 monthly. But the medical education reform law of 1982 specifically prohibits giving the specialists higher pay than the status. The minister therefore invoked the "workload" of specialist interns to justify her move, leading to charges that she had violated the spirit of the law.

To avoid a strike by angry generalists, whose workload is often equal to or greater than that of specialists, the minister offered them an across-the-board increase to \$60 a month. She also plans to offer the \$140 bonus to between 10 and 20 per cent of the generalists.

Nonetheless, the abandonment of the principle of equal pay for different categories of intern seems to mark the end of the attempt to upgrade the status of general medicine in the face of the specialists. Reforms were put through by laws in 1979 and 1982.

But the medical students' strike of spring 1983 had already forced the government to drop the generalist route for four-year medical students that the 1982 law had aimed to establish. This exam would have been the entry route for advanced training in either general or specialist practice. Its elimination meant effectively that GPs would continue to be those who failed entry exams for specialist training.

The establishment of different pay scales for the two groups of interns seems to reflect a retreat from the government's reformist policy to an effort to keep the lid on all costs. In response to the students' actions has been widely criticized in the medical profession, which is generally sympathetic to the objectives of the reforms.

Dr Pierre Gallot, president of the National Union of Continuing Medical Education Associations, and author of a lengthy official report on doctors' training, said: "There is a climate of fear which poses a problem."

He added: "For 10 years there has been a clear intention to restore the equilibrium of the system and plans are out to realize this idea. Each time, pressures have gutted them."

Spanish 'slowest to finish degrees'

by Sarah Jane Evans

Spain's students take longer than any others in Europe to finish their first degrees. Three-quarters of them take more than five years, and the average is seven or eight years.

Forty per cent of them repeat courses, a figure which rises to 70 per cent in scientific subjects. An official survey carried out by the Education Ministry which carried out the survey Señor Emilio Lario has said that the current system is "insensate".

In Madrid's largest university, the Complutense, the drop-out rate in elementary studies is 50 per cent, while the drop-out rate in the sciences is 70 per cent. On average, only 40 per cent of the students who enrol for technical or scientific subjects make it to the third and final part of their degree. Even in information science, architecture and technical engineering, where entry on to the first part of the course is selective, only 10 per cent of students continue to the second part.

Another study by CIDE, the Centre for Education Statistics, has found that of every 100 students who started in 1976, only 22 graduated with a final degree. Only 5.7 per cent of Spaniards are graduates, compared with 7.2 per cent in Belgium and Holland, 15 per cent in Japan and 30 per cent in the United States. A student spokesman at Madrid's Polytechnic University has been quoted as saying that the fact that non-degree courses in Spain are longer than the average in Europe (even without allowing for repeating parts of the course) has been a key

factor in making students abandon their studies.

A second cause for student discontent has been severe overcrowding in popular faculties such as law, but the ministry wants to increase the number of graduates, rather than cut back on the number of students. Sr Lario said: "We have to aim for a less elitist system of access and of structuring academic courses. In the rest of Europe students are turned over every four or five years, which means that higher education costs less and can be offered to more individuals."

The secretary of state for universities and research is currently setting up a three-year programme to compare Spanish higher education with that of its neighbours. This will study course structures, how the option system works, types of degree, the link between the degree and professional practice, as well as the issues of access and selection.

Señor Lario wants to increase the participation of the student in the process: "We should not be treating university students like minors. They should be deciding the subjects they want to take and their option subjects, and each deciding the direction of their own degree."

This would seem to be in line with a study carried out by the youth section of the Culture Ministry. This found that more than a third of the students surveyed (a sample of 2000 in Madrid) were dissatisfied with their studies. The older they were and the longer they had been studying the more dissatisfied they were. Only 14 per cent spent more than 26 hours a week studying. The largest group, 43 per cent, spent between 6 and 15 hours.

Japan falling behind in creativity stakes

by Geoffrey Parkins

Japan's graduates have consistently been shown in international tests to be ahead and above their American and European counterparts, and Japan consistently produces nearly as many engineers as the much larger universities in the United States.

But, ironically, the Japanese themselves are increasingly concerned that their education system is not producing the right kind of scientists and engineers that will enable Japan to maintain its industrial competitiveness in the 21st century.

In particular, many scientists, industrialists, educationalists and politicians, including Japan's prime minister Yasuhiro Nakasone, believe that the development of such vital attributes as "creativity" and "inventiveness" have been severely neglected in the education and training of Japan's scientists and engineers, without which it is feared they will fail to produce the ideas needed to carry Japanese industry forward.

Current thinking largely attributes the lack of creative ability to the education system's over-emphasis on rote-learning for examinations and the priority given to research in the universities.

After the third year of elementary school the curriculum is dominated by rote-learning for the university entrance examination. Helped no doubt by the Japanese predisposition to single-minded dedication, the traditional high value placed on memorizing vast amounts of information, and the fact that reaching university and obtaining a degree is seen by most Japanese as the point at which one succeeds or fails in one's career - young people become obsessed with examinations, leaving little time for the development of creative abilities.

Like the curriculum generally, examinations in Japan, which are mainly multiple-choice, tend to be rigid and objective, leaving little or no room for individual flair or imagination, and largely depend on the capacity to recall memorized facts and solve mathematical problems. High school students preparing for university entrance examinations have to undergo no less than seven separate maths courses and about the same number in science.

When they reach university, Japan's science and engineering undergraduates, who constitute about 4 per cent of total university intake, and very little change in approach. Research and laboratory work receives low priority and past grades rest heavily on examination performance.

The main reasons for the lack of basic research in Japan's universities are partly historical and partly financial. It is only since the war that Japan has developed its science and engineering graduate schools. But by far the more important reasons have been the central government's tight-fisted attitude when it comes to basic research, with the greater proportion of funds to applications-research.

Student aid controversy rages on

from William Norris

On Capitol Hill the argument rages on over President Reagan's proposal to cut \$2.6 billion from college student aid over the next three years, and a so-called compromise between the president and senate republican leaders has done nothing to damp the fires.

The part of the new agreement causing most anger in higher education circles is a proposal to use \$8,000 as the assumed annual cost of a college education when deciding the amount of federal money which would be available to a student. The government would subtract from the \$8,000 an amount that the student's family would be expected to contribute, based upon family size and income, and make a loan of the remainder.

The snag about this is that most private universities have fees far higher than \$8,000 - in 1984 the average was \$10,848 and the proposal is regarded as a deliberate effort to drive a wedge between the public and private sectors.

"We think it's pretty outrageous," said Charles Saunders, vice president for governmental relations at the American Council on Education. "It seems to just kiss off the neediest students and tells them don't even bother to attend one of the more expensive private schools. We think it's wrong, and a malicious kind of approach to splitting the higher education community."

The new proposal replaces Mr Reagan's original intention to set a limit of \$4,000 on all forms of aid to each individual student. "We don't consider it much of a compromise," said Richard Jerns, of the American Association of State Colleges and Universities. "Our feeling is that this is still a major cutback in higher education funding."

One concession has been gained from the administration: the proposed cap to deny guaranteed student loans to families with incomes of more than \$24,500 has now been raised to \$60,000 dollars after heavy Congressional criticism.

There is every likelihood of many more changes before the budget finally emerges from both Houses of Congress - an event which is not expected for several months.



Mrs Thatcher was mobbed and jostled by cheering students at the Bandung Institute of Technology in West Java on her six-nation tour. She had flown to the mountain city to visit the institute and Indonesia's fledgling aerospace industry. Security men and police had to push the enthusiastic crowd back. Mrs Thatcher called the welcome "most remarkable, something I will never forget".

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Soviet rules hamper exchange

New restrictions and legislation could considerably hamper further scientific and academic exchanges with the Soviet Union, according to evidence presented at the Fifth International Sakharov Hearing in London last week.

New penalties, imposed since May 1984, on transmitting "work-related" information to foreigners or on supplying them with assistance such as transport will considerably hamper the traditional informal contacts between visitors to international conferences held in the Soviet Union and their host-colleagues.

Censorship procedures, it was noted, have been considerably stepped up, so that all scientific correspondence bound for a foreign destination has to be sent for approval to Moscow and then back to the institute of origin before it can be mailed. This procedure can take up to three months.

The International Sakharov Hearings were established in 1975 to monitor Soviet compliance with the human rights agreements to which the Soviet Union has put its signature, in particular, the Helsinki Final Act. According to one panellist, Soviet scholars who personally support the official Soviet policy on dissent are instructed by Party activists to passively agree.

Party activists to passively agree.

Turkish students arrested

From Bernard Kennedy

ANKARA

Turkish students calling for new examination rights must be reconsidering the wisdom of their campaign following the shock arrest of 14 of their colleagues.

The students' campaign for new examination rights was launched last week after they had visited parliament to discuss the issue with MPs.

The two opposition members who had invited the 14 students at the capital's Ozi University, to present their case were furious after the incident. "Are we going to be arrested too?" demanded Piri-Saglar and Cuneyt Canver of the Populist Party.

But they were powerless to intervene as security police prepared to charge the students with incitement to contravene the martial law ban on unauthorized marches and demonstrations. The students' names and addresses had been taken by security officers at the parliament and they had been picked up at their homes in early morning raids.

Over the past few months, thousands of students have signed petitions, lobbied MPs and written to the president of Turkey. They are seeking the right to a second rest: in cases where a student is in danger of being sent down for failure in any one of the various courses he or she is obliged to take. Populist Party MPs have filed motions supporting them in spite of point-blank opposition from the Higher Education Council.

The 14 now awaiting trial are not the first casualties of the campaign. Fifteen undergraduates in Istanbul University law faculty are currently being tried by a military court for allegedly taking part in a demonstration in front of the faculty administrative building in response to a call to action from the outlawed Turkish Communist Party. They face prison sentences of five to 15 years.

Police and university authorities clearly feel that any form of organization on the part of students, however apolitical in appearance, could lead to a revival of the campus disputes and student violence which preceded the 1980 military coup. That also explains why students involved in food boycotts have been harassed and attempts to set up a student association at Ankara University law faculty and a theatre club at Ankara's Middle East Technical University were hindered.

According to the 1982 constitution and 1981 Higher Education Act, students are forbidden to organize unions, join political parties or engage in any form of political activity on campus.

Gift becomes bone of contention

from William Norris

WASHINGTON

Princeton University is giving away its bones. The university's vertebrate palaeontology collection, which contains 24,000 specimens and has taken more than a century to amass, is to be presented to Princeton's arch-rival in the Ivy League - Yale. It will go on show at Yale's Peabody Museum.

The decision to give away the collection has been taken because Princeton now wants to concentrate on newer, expanding disciplines such as oceanography, geochemistry and seismology. It does not have funds to continue finding specimens or space for large palaeontology exhibits.

The palaeontological exhibits in the university museum will, however, remain on display and a small collection of vertebrate and plant fossils will be retained for teaching.

In giving the collection to Yale, the Princeton board of trustees has gone against the recommendation of a panel of palaeontologists.

One of them, Professor Philip Gingerich of the University of Michigan, said he was disturbed by the decision which he saw as a political power play by one scientific discipline taking over a department. "The collection is much too valuable to be given away," he said, adding that he found it hard to believe the naïveté of the geology faculty.

Dr Donald Baird, director of the Princeton Museum of Natural History, was also upset. Palaeontology, he said, had once been the dominant area in the department, but the university had failed to replace a specialist in vertebrate palaeontology and a botanist studying prehistoric plant fossils. "I think more students are going into this area, but if there aren't any faculty members they can't come here."

At Yale, the gift is being welcomed with open arms.

"The Peabody Museum is gratified that it should receive one of the great historic collections in United States vertebrate palaeontology," said Mr Leo J. Hickey, the museum director.



found it hard to believe the naïveté of the geology faculty.

Dr Donald Baird, director of the Princeton Museum of Natural History, was also upset. Palaeontology, he said, had once been the dominant area in the department, but the university had failed to replace a specialist in vertebrate palaeontology and a botanist studying prehistoric plant fossils. "I think more students are going into this area, but if there aren't any faculty members they can't come here."

At Yale, the gift is being welcomed with open arms.

"The Peabody Museum is gratified that it should receive one of the great historic collections in United States vertebrate palaeontology," said Mr Leo J. Hickey, the museum director.

Threatened law school 'hangs in strong'

from William Norris

It may not be the best law school in the United States. It is certainly not the most fashionable. But Antioch Law School in Washington DC has one unique claim to fame: in the midst of a profession notoriously obsessed with the mighty dollar, it is dedicated to teaching students to defend the poor and the needy.

Now Antioch is under threat. Following an inspection by the American Bar Association, the school's governing board must appear before a hearing next month to show cause why its accreditation should not be removed.

It is a serious matter. Without ABA accreditation, no Antioch graduate would be able to take the bar exam and practice law. To all intents and purposes it would mean the end of the school, which was set up as a branch of Antioch University, Ohio, in 1972, and operates as a "public interest law firm" while training new lawyers.

The threat has united students, faculty and alumni in a never-before-

Before the ABA inspectors arrived, more than 100 turned out on a Saturday to clean and paint the school and to replace the flower beds by the front door. Some students even shaved and several members of faculty abandoned their usual blue jeans for more lawyer-like attire.

It did them no good. The inspectors reported a litany of alleged shortcomings, including a poor academic record, an extremely high student/faculty ratio and inadequate funding. As a result, Antioch seems likely to become the first American law school for 50 years to have its ABA accreditation withdrawn.

Graduates of the school have certainly not been doing too well in their bar exams. In the most recent Maryland tests, 44 per cent of Antioch graduates passed, compared with 85 per cent from Georgetown and George Washington universities, 73 per cent from American University and 71 per cent from the University of Baltimore.

But supporters of Antioch say this misses the point. Unlike other law schools, it was founded specifically to

meet the goal of aiding the poor and educating disadvantaged people who study there are women and 31 per cent come from minority racial groups. All have to earn about a third of their credits handling cases in legal clinics.

Mr Joseph L. Rau, a Washington attorney who is a member of Antioch's governing board, says: "What we have here are lawyers for the establishment, especially the corporate establishment, deciding whether a law school for poor people can continue. That raises a very serious problem."

Isaac C. Hunt, dean of Antioch for the past two years, acknowledged that the school has not achieved as many standards as closely as it might, but claims that things have now been tightened up and that 25 students have been dismissed for academic reasons since November 1983.

The president of Antioch University, William M. Birenbaum, is optimistic. "We have a unique educational experiment, and it has to be seen that way. We're hanging in, man. Strong. This school will survive."

'Dr Rat' liberates animals at wrong lab

from Barbara von Ow

MUNICH

Animal welfare campaigners condemned the laboratory of the physiology institute at Kiel University last week for apparently unaware that the research facilities were being used to develop alternative methods to substitute animal testing.

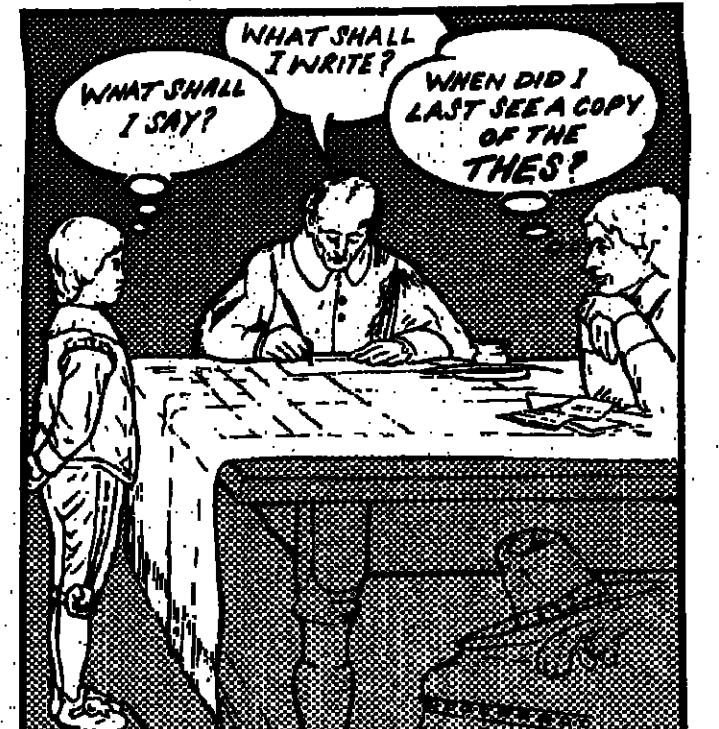
In one of the most violent actions of animal protesters in West Germany, a group calling itself "Doctor Rat" and a group of friendly revolu-

tionary "Ester Hares" broke into the institute last night, and liberated all rats, guinea pigs and sheep while destroying research material and equipment worth several hundred thousands of Deutschmarks.

Calling the attack "schizophrenic, blindfolded and vandalistic", one of the scientists at the institute said the scientists at the institute said the action had hit the wrong victims and wiped out an 18-month government subsidized research project into alternative testing methods. It put a stop to a group of friendly revolu-

three million animals are still being used annually for scientific experiments, according to ministry figures. While most experiments are used for drug tests, some 30,000 animals are estimated to be used for tests in the cosmetic industry.

The Kohl government has submitted a draft law under which animal experiments would be cut by half. It says it is impossible, however, to ban such experiments altogether as animal such experiments are the sole democratic opposition party have demanded.



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Olga Wojtas talks to the new principal of Queen Margaret College, Edinburgh

A head start on the problems

When Donald Leach takes over from Claudine Morgan this summer as principal of Edinburgh's Queen Margaret College, he can be confident that he will have a somewhat less traumatic introduction to the post than she did. Miss Morgan leaves a college with 1,200 full time students, five degree courses, and a broad range of diploma and professional courses. But Queen Margaret, one of Scotland's 14 central institutions, has undergone a complete transformation since Miss Morgan arrived in 1971.

The college, founded 110 years ago, achieved preeminence as a domestic science institution, popularly called "Athol Crescent" after its west end address. In 1970, the college moved to new, purpose built accommodation, but the Scottish Education Department took advantage of the move to redistribute all the college's short courses to further education institutions.

Miss Morgan therefore found herself heading a college of 450 students in accommodation built for 900, with only three courses: home economics, teacher training and diplomas in institutional management and dietetics.

But the SED had been waiting for a change of principal to launch the final attack. Queen Margaret was in the anomalous position of being Scotland's only non college of education to run teacher training courses. Home economics teacher training had historically been the preserve of the domestic science central institutions, but this had now been transferred to the col-

leges of education in other centres.

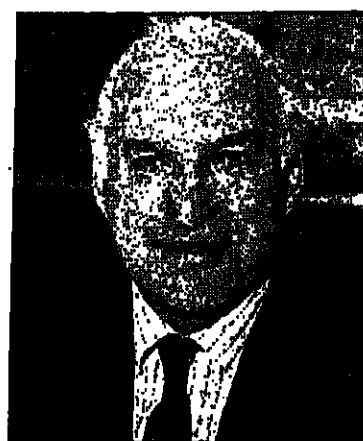
Asking the course meant the loss of a quarter of Queen Margaret's students, including all those in fourth year. And the SED was clearly not going to tolerate a new college being two thirds empty. Labour MP George Foulkes stigmatised it as "nothing but a white elephant". Either the college was filled, or it was poised to disappear within a larger institution.

Miss Morgan had previously been vice principal of Elizabeth Gaskell College which had survived a similar crisis through expansion. "I suppose it was good training. I realized we would have to diversify and raise diploma work to degree level," Miss Morgan, quite innocently, did not approach the college's paymasters, the SED, but buttonholed the chief officer of the Council for National Academic Awards at a conference and asked if the college could run CNA validated degrees.

Fortunately, the SED approved the *fait accompli*, and the college not only upgraded its work in dietetics and home economics, but expanded into paramedical fields, drama and communications courses.

Miss Morgan and Mr Leach share the view that there should be further upgrading and expansion, with the introduction of honours and masters degrees and continuing professional education.

Miss Morgan sees this as particularly crucial for the nursing and therapy courses. "Advances in medicine have brought corresponding pressures on



Mr Donald Leach



Miss Claudine Morgan

paramedical professions. Their role becomes more complex as medicine becomes more successful. There are children with multi-handicaps coming to our clinics who years ago would never have survived."

Miss Morgan fully endorses the SED's view that central institutions are vocational and professional colleges - Queen Margaret has a graduate employment rate of over 90 per cent - but is unhappy with the concomitant lack of SED funding for research. Some CIs, particularly the science based ones, have been able to attract external funding, but breaking into research work is difficult for a college like Queen Margaret without an initial injection of funds, she points out.

She hopes the Scottish Tertiary Education Advisory Council will recommend a more flexible policy when it reports to the Secretary of State for Scotland later this year. She speculates that STEAC may also suggest a federation of central institutions, which could form the basis of a Scottish degree awarding body.

An indefatigable proponent of a federated system of Scottish higher education colleges was the former principal of Napier College, Dr Joseph Dunning. And Mr Leach, currently Napier's assistant principal, claims the credit for putting the idea into Dr Dunning's mind with a newspaper article he wrote calling for a Lothian and Borders Polytechnic.

However, Mr Leach now feels the time for such a move has passed. "Ten years ago would have been the heyday. But the whole system has developed a lot since then."

Mr Leach suggested that Lothian region take over the running of all the area's colleges, but does not oppose the Government's recent decision that the SED have control of all advanced further education, with Napier itself leaving Lothian's control to become a CI.

"Scotland had to make up its mind what system it wanted, and now we've got one system." Centralized control of tertiary education, he believes, obviates the need for further mergers.

There is little evidence that south of the border have not improved teacher training, for example, while a common framework system in Scotland enables a teacher to be achieved through collaboration through amalgamation.

Napier runs an applied chemistry degree jointly with the Scottish College of Textiles in Galashiels, and Leach maintains that their collaboration "has been as easy as the collaboration between faculties at Napier".

He does not see Scottish higher education as an option. "Scotland is not really big enough to do its own validation. With some subjects at Queen Margaret, physiotherapy, occupational therapy, can you validate with two or three institutions doing for Napier, Scotland's fifth largest tertiary institution, spanning arts, science, technology and professional studies, vastly different from the college at Queen Margaret College. But it is as quality. Napier is not the same as quality. I think it is a narrow focus compared with Napier, but to go from nursing to drama the narrow."

Mr Leach has had experience running a small unit as Napier's science faculty, which only six degrees, including the college only MSc. His own academic background is in maths and physics, but Queen Margaret's work is "not in least a foreign field", he says, since he has spent many years as a member regional hospital boards and Lothian Health Board.

"I've got a lot of ammunition with which to fight Queen Margaret's lies," he says adding however, "you're on the defensive all the time. You've got to have an ebullient attitude."

Will youth year be wasted on the West?

Nowadays every year belongs to someone. 1984 was International Women's Year, before that the disabled had their turn. But how many people realize that we are in the middle of the International Year of Youth?

The answer, it would seem, depends very much on where you ask the question. In the Eastern bloc, where the proposal originated, IYY has a high profile and financial support to match. Some third world nations, too, are making much of the initiative, but in parts of the West the level of official interest is almost non-existent.

There are honorable exceptions, such as Canada, where the federal government has given \$12 million for its "Young and Alive in '85" undertaking. But elsewhere the story could not be more different. For example, a spokesman for the United States Education Department, asked what America intended to do to support IYY, said, "Frankly, I've never heard of it. But we don't have anything in the budget, so I guess the answer is nothing."

In Britain, the official attitude is not quite so dismissive but the declarations of support and minimal funding smack of tokenism. The seven-strong IYY secretariat was given £110,000 by the Department of Education and Science, which had to be used to convert a basement into office accommodation as well as supporting activities during the year.

Although, in common with the leaders of all the main political parties, Mrs Thatcher has pledged her support to IYY, the size of the grant seems to reflect the Government's real feelings. The fact that the proposal to devote 1985 to youth was made at the United Nations by Romania and was



The United Nations' International Youth Year means different things to different countries. The THES focusses on Britain, Australia and Turkey

given somewhat different objectives to those suggested by the West may have more than a little to do with it.

Western governments wanted participation to be the theme of the year, having accepted its designation, while the Eastern bloc wanted the emphasis on peace and the Third World proposed development. True to United Nations form, all three were adopted, allowing countries to take or leave the elements they wanted.

Britain, in common with most of the 120 countries known to be marking the year in some way, set up a coordinating committee to organize activities. Since then the Government has kept IYY at arm's length, with the result that it has a low profile nationally and has taken on a distinctly radical flavour.

The issues addressed and the approach of the organizers have been political, as young people

have taken control of the activities themselves.

The first edition of IYY's monthly newsletter, *Spark*, exhorted local groups to say "no" to adult domination and exhibited a healthy cynicism about the value of international jamborees. "An international festival of youth in Jamaica is not much use if you can't afford a drink at the pub," the main feature complained.

Joint presidents Julie Walters, the actress, and Paul Weller, the rock singer, have encouraged the mass approach to IYY's activities. And, in terms of participation, this appears to have been successful, with more than 100 local groups formed and a majority of those involved said to be unemployed, unattached or youth trainees.

However, the organizers make no claims to success nationally. The underground and music press apart, the year has attracted nothing like the attention to Women's Year or the Year of the

Disabled, and only the Opposition parties have taken up the themes of IYY, which include the widening of opportunities in further and higher education, improvements in housing provision for the young and the achievement of a statutory youth wage.

Ms Evelyn Gillan, one of the organizers, said: "Nationally, we are not at all pleased with the way things have gone. We still think there was so much more that we could have done, given the resources."

Finance difficulties notwithstanding, it is hoped that increased political campaigning will take place in the second half of the year, however. Senior politicians will be called to account at a "youth parliament" in November and a national conference is also scheduled. The organizers are determined that the year should leave some positive achievements for the future.

It must be said that the prospects do not appear good at the moment. Mr Barry Sheerman, Labour's spokesman on youth, has asked a series of questions in the House of Commons without eliciting much of a response from ministers. "The trouble is that the themes are an embarrassment to the Government. There is a strong argument for saying that the Budget was anti-youth, but we will keep battering away at them."

No one expects the Governments to go as far as Romania, where a Youth Act is being drafted, incorporating rights and responsibilities for young people. But it will be a disappointment if the initiative is simply allowed to drift past.

John O'Leary

Australian aim is action, not hype

Although International Youth Year is Australia began with what someone called "the nervous silence that marks church fellowship teas", it is now a more lively, visible affair. The federal government early on announced an Aus \$2.3 million programme based on participation, development and peace, as well as a special Aus \$1.8 million grant to employ 100 or so young people under the community employment scheme. They will work on the staff of the development project.

To demonstrate his commitment to youth, the prime minister, Mr Bob Hawke, shifted the Office of Youth Affairs into his department after the December election, taking it away from the minister for education, Senator Susan Ryan.

Mr Hawke clearly wants a direct involvement with policy development in the youth area and he has seconded to the youth area and he has seconded to the youth area, John Dawkins, to supervise its implementation.

Dawkins' main brief is to coordinate with substantial policy directions in the planning before this year's August budget.

The government, according to one Canberra report, wants to ensure that the celebration of IYY "isn't dripping with political hype", to quote Mr Dawkins.

Although the government and the Office of Youth Affairs are looking towards Australia's bicentennial year in three years time as a target for the more significant reforms, IYY will not only be a launching pad. Programmes during this year will include a series of youth art festivals, a national project for students to submit essays or art works on peace, and investigations on issues facing disadvantaged youth. Suggestions made by young people so far include "youth parliament" - carrying out reviews of policies on youth and making recommendations to all houses of parliament.

A Leverhulme Fellow, Dr O'Callaghan, has been appointed to extend the museum's educational activities. He is already discussing links with the London University Economics, Keele University and Manchester Polytechnic, all of who are interested in using IYY as a teaching their social and industrial history students.

But Mr O'Callaghan also sees potential in IYY for a new understanding of Britain's industrial revolution, which - situated in green fields or the M4 corridor - is, rather than urban revolution, he argues. "What I would like to see here is the establishment of an institute of institution, museum or centre where the whole phenomenon of industrialization, social, economic and technological, could be brought in all its aspects."

The library, which includes the entire library of the Coalbrookdale Institute showing what educated Victorian workers were reading and learning, is also a source of much material on the iron and steel trades, collect, journals, trade catalogues

and a huge collection of Thomas Telford material rarely found elsewhere. Librarians are asked to identify Coalbrookdale items not just by the Victorian and Albert Museum but from wherever in the world. Indeed, the Brazilian jungle for instance, that Britain's empire builder and their technology reached. There are also short courses on railways, ceramics, Great Exhibitions and costume.

Karen Goss

Creating a new generation

The Turkish authorities have warmly espoused the United Nations Youth Year. Their aim seems to be to create a new kind of young person, interested in study and sport rather than politics and terrorism.

The president, prime minister and education minister have all made speeches on the subject. So has virtually every university rector in the country. Innumerable series of conferences and sports events have been organized. And the state broadcasting corporation has started a television show aimed at young people.

The enthusiasm with which Turkish leaders, most of whom still owe their positions to the 1980 military coup, have embraced International Youth Year can only be explained by reference to the years of turbulence which preceded the coup. It was a time when schools and universities were repeatedly struck by political boycotts; when hundreds of thousands of young people were involved with frequently extremist and often violent movements, and when a 16-year-old boy could shoot several people, as he later testified, "because we thought they belonged to the other side". The re-emergence of such a situation is the biggest nightmare of today's authorities.

But how does one set about the rehabilitation of a generation so badly scarred by violence, suppression and prison? The recent prohibition of concerts by Rahmi Saluk and Sadik Goryps, certainly seemed to be an attempt at preventing "pre-1980" intellectual leftists from getting together again.

In reality, there is scarcely such a thing as a cohesive youth policy. All those concerned are acting on the basis of their own ideas. Professor Cemil Demiroglu, rector of Istanbul University, described the aim of his university's Youth Year activities as "to try and make good our deficiencies and understand the basic problems of young people so as to bring up a generation healthy and balanced in mind and body." Honorary professor and businessman Vehbi Koc, in a television talk, said he expected young people to "enjoy themselves moderately, study moderately and rest moderately; to go to bed early and get up early, and above all to be attached to their country and their religion."

What is emerging is a patchwork of carrots and sticks. The carrots include the new television programme, which with its high-quality western and local pop-music, feature items on topics such as apprenticeships and news of examinations and applications opportunities has already become one of the

Bernard Kennedy



A mid-19th century view of Coalbrookdale

The builders have begun a new wrought iron works at the Ironbridge Gorge, over 250 years after the first iron smelted with coke there launched the Industrial Revolution.

The iron works is the latest development in the Ironbridge Gorge Museum, a six square mile treasure trove of industrial history based on Coalbrookdale, where in 1709 ironmaster Abraham Darby found smelting with coke instead of charcoal produced far greater and cheaper quantities of metal - enough to make the wheels, rails, cylinders, bridges, boats, aqueducts, steam engines for Britain and her Empire.

Visitors to the museum will not only see traditional wrought iron work, but hear it and smell it as well. When the museum was first conceived it was as a park of industrial monuments, machinery, preferably not rusting. Visitors could walk around and admire.

Remnants of that idea, like the last iron barge from the Severn, remain dumped in various fields. But the museum now is geared to creating in visitors an experience of the past, even if it is sometimes rather a historical hotchpot.

It has grown out of buildings which were at the heart of 100 years of astonishing inventiveness and prosperity - of the masters at least - in East Shropshire, culminating in the world's first iron bridge, completed in 1779, and falling into decay in the second half of the 19th century

Wrought iron links with the past

as industry moved to the West Midlands, South Wales and the North. The main monument is Abraham Darby's original 1709 furnace, twice enlarged and next to a museum of iron in an old warehouse with a cast-iron clock-tower of its own. The museum traces the history of iron-making and has a collection of wrought iron work.

Up the road is the Coalbrookdale Institute, the first adult education college in the country, built by ironmasters for the scientific, literary and education of their workforce. The houses of those workers, still in disrepair, can be seen huddled on the wrong side of the river, overlooked by the mansions of the ironmasters. The institute is now a study centre and youth hostel.

Further along the riverbank, past the Bedlam furnaces still being excavated, is the Coalport china works, again a museum of kilns and china, and a tile works also under excavation. Then up the hill to Blis Hill Open Air Museum.

The hill, the part probably most remembered by Ironbridge's 100,000 children and 250,000 total visitors each year. History fanatics pay to come and work at Blis Hill. All the staff wear Victorian dress and there are no signposts or written explanations as you have to ask them

about what they are doing.

Its focus is a market square, mainly dating from the end of the 19th century, though a short walk away is a Telford toll-house and squatters' cottages, which go back rather earlier. But the emphasis is on authentic atmosphere rather than extreme consistency.

"The buildings have been culled from around the country; the public house, from Wales for example. There is a pharmacy, a butcher and slaughterhouse, a printer's shop, an undertaker's, a plasterer and a saw-mill. ICI wanted a Victorian drama, a constructed one and then gave it to the museum. A miner's chapel was presented ceremoniously by a march of local miners whose pit had closed. Any modern technology (like the electricity heating the traditional tallow in the candle-maker's workshop) is, like Victorian plans, legs, decorously hidden.

The staff are a mixture of historians and locals, the latter with family and neighbours' tales to tell going back to the period of the museum. In the Coalport museum a film about the china works and conditions there is narrated by a local man who worked there at the turn of the century."

The museum is funded privately,

though it has had plenty of backing from Telford town corporation. Apart from a spot of opportunism - settings for Dr Who and Mastermind - it has had grants from trusts such as Gulbenkian and Leverhulme, the latter for building up its already substantial education work.

Its Institute of industrial archaeology, founded in 1978, and jointly administered with Birmingham University is the only higher education institution in Shropshire. It runs postgraduate courses - diplomas and masters - in industrial archaeology, and supervises related research degrees. The link with Birmingham is extended in an MA in heritage management in which the Ironbridge experience plays a major part.

There are around 60 students on all three courses, with two permanent lecturers. But the institute is also responsible for up to eight excavations a year, and has just received a three-year Nuffield Foundation grant to make an archaeological survey of the whole area.

The library, which includes the entire library of the Coalbrookdale Institute showing what educated Victorian workers were reading and learning, is also a source of much material on the iron and steel trades, collect, journals, trade catalogues

Museum staff outside the New Inn at Blis Hill



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Karen Goss



Peace is one of the main issues in International Youth Year as portrayed in this British poster

red within a generation. Yet the principal institutions of Australian society have not fully accepted the fact that youth is no longer a brief transition.

And, more than at any other time in the past, they are subject to special strains and stresses. Families are smaller and more mobile. By the age of 15, a quarter of Australia's youth have experienced the loss of a parent through separation, divorce or death.

As a result, says a report prepared for International Youth Year, young people become increasingly dependent on their peers. They are particularly vulnerable to media and other commercial exploitation. Often they are presented with an image of success and denied the means of achieving it.

The same report, the outcome of discussions with more than 1,200 young people around the country, noted that young people see themselves and are perceived by older Australians as part of a distinct social group.

"Music especially is important in their lives. Music is the means by which they identify with each other. It sparks them off as young people," the report says.

Geoff Maslen

Bernard Crick

In his Easter bonnet with the visor on it

Those of us who invested part of our lump sum with Solomon and Flanagan on John Selwyn Gummer being our next Tory Prime Minister early in the new century (the odds are attractively long) will be worried by some of the action on and after the Easter conference front. I have a genuine affection for John Selwyn: he could do, possibly still can, the best Enoch Powell imitations since Jeremy Thorpe retired; so I am sorry that he has fallen out with the young gentlemen and their knight errant, Sir Alfred Sherman. Sir Alfred is a dangerous man to cross. In his student days one could not leave the chess board unattended one moment.

Gummer will end up as minister of sport, if he doesn't take it, with the job of getting them ****ing hoolies back on the terraces where they belong, off the conference floors and out of the showers. Perhaps the most he can hope for in a new Tory government would be chairman of NED (National Educational Enterprise Department) which will take over from the Department of Education and Science, the Schools Council, the Economic and Social Research Council, the University Grants Committee, the National Advisory Body and the rates (by instituting PAYG - Pay As You Go). Or he may be ordered to apply the new Jarratt principles of business efficiency to the civil service.

The only time I have personally ever addressed the annual conference of Conservative students was in 1964. In those days they were called FUCUA, a name they changed for wholly non-ideological and commendable reasons. The winds of change were blowing gently before the general election and they asked me to speak on "Parliamentary reform", which in those days seemed a very sensible subject. They were very polite indeed, they sent an "Hon" in an MG and minister to fetch me to Eastbourne all the way from Brighton, where I happened to be staying at the time.

They were all terribly well behaved and they called me "Sir", deprecated extreme antagonisms between the parties and "thought it very important that we could get together on cross-bench issues occasionally". (I should have signed them all up for the Hansard Society on the spot.) And if there were a few Highland gentlemen among them, they asked sweetly of tweed, heather and horse, not of North British urns and gross humanity.

Yet the press reports probably were a wee bit exaggerated. As for the mess in the shower, no one was actually seen coming out in a kilt; and we old men should be tolerant of the young when they, with intimations of mortality, get caught short. Indeed, the whole question of student violence is very relative and needs, of course, putting into context and treating in comparative terms.

I remember, when the front gates of King's College in the Strand had been locked all afternoon, following a tip-off, being one of a large mob swinging a sawn-off telegraph pole against the side door of King's Union in Arundel Street (this was in 1949 when the telephone services first began to go underground). A young bobby started to move in on us, but restraining hand from another old sergeant caught his elbow. "Steady on lad, it's on the young students having one of their rags. The old fellow beamed down on us as if he wished his sons were like that, or that his daughters could pass through Flanagan's and marry us.

Of course we were not all like that. My fellow student, Alfred Sherman,

scorned such bourgeois frivolity and would only sit seriously, when not playing chess, discussing controversies about the precise routes of medieval caravan routes from South Russia into Europe and Asia - line of talk that not all of us at the time were sophisticated enough to associate with the possibilities of subsidized travel to eastern Europe (the main activity of the London School of Economics Chess Club in the days when its officers were John Stonehouse, Bernard Levin and Kenneth Watkins - I often wonder what happened to them).

In fact it is politics that has given student violence a bad name. Until the adjective "political" got attached a good deal of student violence was tolerated. When rugby clubs got drunk after victory (or defeat) and smashed up a bar, well, the *Sheffield Morning Telegraph* ("Circulating in Four Counties") did exaggerate a bit - a window-pane perhaps, a few glasses smashed and borrowed, certainly, and a couple of chairs whose usefulness as chairs was terminated, but they never called this "student violence" generically or saw it as the first step of escalation to universal anarchy and disorder. That came later.

My theory is that rugby clubs and rag mobs knew - in Oakeshotian terms - how to behave. They knew from experience the conventionally accepted limits of tolerance for their activities. Forms of violence are, in fact, ritualistic.

But in the 1960s, to continue with my theory, students began to join or to get up demonstrations who did not know how to behave. Old trade unionists, Communist Party, Independent Labour Party and Labour Party activists, Communist Party, Independent how to behave on demonstrations. They had had a lot of experience in these matters. They knew how far they could go and the police knew how far they would go; and both knew that the other knew. But the students didn't know and the police knew they didn't know: one lot were rendered excited with uncertainty and the other nervous.

All this is another problem of the three-year generation. The first year are proving themselves, the second year take over student organizations and then vanish into belated examination preparation in their third year. A small Labour or Conservative Club or Libertarian right extremists, the next year they have their way and lose their memberships, so the year after either a few moderates fight back and retake over, or the whole thing collapses or divides.

Moreover, as student politics is, in fact, almost purely internalized, it tends to degenerate, both on left and right, into a kind of street theatre, the passing of resolutions at union meetings and conferences; and the only hope of touching real politics is if some of these resolutions are so way-out and provocative that the press forces the party leaders to pay attention to these fanatics.

The irony is that the wild night has now learned some of the tricks of the trade of the left. And cynics, rather like revolutionaries, don't care how far they go so long as they are offensive enough to stir up public reprove.

The only palliative is extreme tolerance - as our mothers taught us. "Sticks and stones may hurt my bones but words will never hurt me." The only cure is for the national parties to encourage students to join their local parties as well as the national ones and be exposed to the real, intergenerational, continuing world from which the universities shield them. That's what a Victoria



Home thoughts from abroad

Mary Bouquet reflects on the limits of academic exile

Whatever else it may be, academic exile isn't "academic". There are, of course, various kinds of exile: no one is likely to confuse the occasional bout of Tarkowskian *nostalgia* suffered by those temporarily marooned in Chicago or Canberra with, say, exile in "Third World" southern Europe.

This latter form of exile may mean a number of different things: having to work in another language; loss of access to libraries and archives housing customary resources in a customary order. Ineligibility for research grants in Britain because of residence abroad is another tribulation.

Most, if not all, British funding institutions have not yet woken up to the fact that serious young academics cannot be "normally resident" in Britain if they are obliged, in pursuing their work, to have an address elsewhere. Does this make them less British or less deserving? Or has someone got the idea that they are privileged to be working in a sunny country - vaguely associating them with the beautiful expatriate people whom they probably think of as living in such places?

The Catch 22 is that such young academics are also likely to be ineligible for research grants in the country of exile because of research grants in the country of exile because of foreign citizenship; and in any case, where these exist, preference is usually given to foreign scholars coming from abroad rather than those who might be in *stasis*. Loss of regular contact with colleagues in Britain except by correspondence (a dying art) and infrequent visits back which are dependent on being invited.

Let there be no mistake, "enforced or regretted absence from country of home" as *Chambers Twentieth Century Dictionary* defines "exile" - *The Oxford English Dictionary* is just too weighty for an exile to carry around with any facility. Is a measure taken in the face of research and teaching prospects in contemporary Britain. No one is actually banished, but the stamina required to live on the margins of British academia weeds out all but the hardest perennials.

The field of local anthropology is admittedly rather special. Anthropologists have always been a species of academic outsider and there are undoubtedly those who would like to see their discipline internment: effected within the present academic structure.

The logic and irony of this process, considered historically, is that the suppression or dilution of anthropology in "relevant" studies occurs at the very moment of its coming of age. The maturation of anthropological thought, focusing upon the natural order of things in our own societies, together with the customary ways of knowing those societies, is being undermined by the very process of its institutionalization.

be snuffed out before getting under way.

The very practice of doing fieldwork demarcates anthropologists from their colleagues in other disciplines. But there is an important distinction here. A couple of years in the field is one thing; working in another culture is something else.

There is a whole generation of anthropologists who finished their studies at the end of the 1970s, no longer able to be accommodated by Britain's fading university system. As far as the British academic establishment - what remains of it - is concerned, this generation has simply ceased to exist. We are assumed to have been absorbed into other fields, thereby making worthy contributions to the diffusion of anthropological ideas.

Exile has taken various forms - not necessarily overseas, as in my own case, but always something of a disorienting act. It is not satisfactory to point out that 1950s and 1960s were unprecedented in terms of full employment, or that intellectuals like every body else should get on with getting by. Many of us have quite different ideas about the importance of anthropology, and are not prepared to compromise in pursuing those ideas, more than anyone else who has invested 10 years and upwards of their lives to their profession should be.

What is the other side of academic exile? Having looked at some of the push factors, the pull elements should not go unrecorded. An anthropologist reared in the traditions of the British school is in for a shock when she or he begins teaching or doing research elsewhere.

After a short-term contract in one particularly moribund English university, the vitality of the social sciences impressed me most on my arrival in Portugal. Eleven years after the revolution lamentably little is known of this Portuguese work - mainly because little of it has been translated as yet.

The tremendous wave of intellectual reflection on Portuguese society, from within, has come since 1974. Students reading anthropology and sociology are conspicuous in their desire to study their own society. One is forced to think seriously about developing an anthropological mode of thinking as the purpose behind studying a corpus of thought - say, Anglo-Saxon theories of kinship and family from Malinowski to Barnes - almost as a piece of technology.

This was the sort of connection which remained fuzzy during my undergraduate years at Cambridge. Nobody was making the link; there was no collective thrust to study British society as anthropologists. Those of us who did so felt distinctly on the edge - there was nothing very convincing about affirmations of interest in bring-

ing anthropology back home.

Anthropology lectures here in Portugal are punctuated by questions from students. This questioning goes further, I think, than the obvious difficulty of rendering concepts and theories which belong, in this case, to British anthropological discourse. There is a kind of engagement and operationality to it which I can only really contrast with my experience of an English undergraduate.

Our attitude in England towards lectures was that they spoke and we listened and wrote frantically, or didn't if they were having an off day. The presupposition that we knew far more than we did; there was little chance to find out if they knew as much as we thought they did. There was in fact, beyond exams, little in the way of collective purpose.

The process of measuring that part of academic life in which the participants and observers - which is necessarily restricted - inevitably takes place against the backdrop of what is known of the "home" system. Distance, and seeing through the glass of another system, provokes a transformation in understanding of the first. In terms of the practice of an exile, the implications of this transformation can be seen in how he or she thinks, writes and teaches.

The partiality of my own reflection on academic exile is not only unavoidable but should be fully assumed. Assuming this partiality does not mean autobiography; to the contrary, it represents a way of crystallizing verification and discussions over a certain period with other members of the lost generation, fellow exiles and, in this particular case, with the generous, sensible Portuguese.

The limits of academic exile are quite clear. As one senior British anthropologist remarked in 1982 when discussing the life trajectories of geographically mobile intelligentsia: "It's fine while you're there. The difficulty is when you want to get back again."

This is an anxiety which must be present in the mind of anyone who has not decided to change their nationality, "marry in", or in some other way settle for definitive adoption in the country of exile. Here, clearly, a much more fundamentally personal dimension of academic exile is at stake.

The Portuguese have a special word for homesickness: *saudades*. For an English anthropologist whose field is (was?) England, *saudades* have a particularly convoluted semantic charge. This perhaps deserves an article all its own.

The author is a lecturer in social anthropology at Instituto Superior de Ciências do Trabalho e da Empresa, Lisbon.

V. H. Heywood on one of the most taxing tasks for today's taxonomists

It is interesting today, when Britain's commitment to the European movement is often questioned, to look at the origins of *Flora Europaea*. Despite inconclusive discussions at the International Botanical Congress in Paris in 1954, on the desirability of writing a *Flora* of Europe, a group of British (and one Irish) botanists, with a special interest in plant classification, floristics and ecology, felt that it was both timely and necessary to go ahead and make the necessary plans. This was based on their conviction that the academic, didactic and practical benefits of such a venture would be very considerable. A view also shared by university botanists in other parts of Europe who were tentatively trying to establish links that the war had largely broken.

Although political barriers between East and West had by then been erected, botanists were anxious to cooperate across them and on the basis of *Flora Europaea* organization, as it became, was the simple participation in its meetings by botanists from communist bloc countries. As the chairman of the editorial committee, Professor T. G. Tutin, aptly entitled a BBC talk on the *Flora*: "Plants need no passports".

This was a manifestation of the emergence of the European movement in the postwar years which led in 1957 to the signing of the Treaty of Rome and to the creation of the European Economic Community, and subsequently the Council of Europe and European Science Foundation. In many ways botanists, especially plant taxonomists, have been in the forefront of European scientific and cultural cooperation since the end of the last world war.

Although the writing of *Floras*, in the modern sense, began in Europe in the 17th and 18th centuries, the vast majority of plant species grow outside Europe, in subtropical and tropical countries. It is generally estimated that there are some 250,000-300,000 species of flowering plants and ferns in the world. Of these only some 11,300 occur in Europe - with the United Kingdom sharing a poor 1,500 of so. Compare this with Colombia, for example, whose flora contains some 50,000 species, with the Chocó in the coastal Pacific region housing perhaps the richest rainforests in the world; or Brazil, encompassing the forests of the Amazon, with possibly 60,000 species, about 22,000 of which were included in the spectacular *Flora Brasiliensis* edited by Karl von Martius, A. Eichler and Urban, and published from 1840 to 1859 in 40 large volumes.

These contained altogether 20,733 pages and 3,811 plates - and the work has been described as the greatest of all *Floras*. Like *Flora Europaea* a century later it involved a large and complex organization of editors, collaborators and assistants. It was heavily sponsored, not by research councils as is the pattern today, but by figures such as "Mad" King Ludwig II of Bavaria, Don Pedro II, the last Emperor of Brazil, and Emperor Franz-Josef I of Austria and Hungary.

While cooperation on European floristics is a relatively recent phenomenon, international collaboration on the world scene, largely involving European taxonomists, has long been the custom, especially during the colonial period in the 19th century. This has led to an uneven distribution of resources - museums and herbaria (housing dried reference plant samples) tend to be inversely correlated with that of the plant species so that the more the species, the fewer the botanists.

Most of the world's taxonomic botanists are to be found in the north temperate region - the United States, Europe - and most of the world's herbarium collections in libraries, yet only about 15 per cent of the world's plant species. Europe alone houses 10 of the world's largest herbaria (two of them - Kew and the British Museum (Natural History) - in the United Kingdom) and about half the specimens (c. 50 million) while the United States adds another quarter of the

One landmark of European botany in the postwar period was the publication of the five volumes of *Flora Europaea* (Cambridge, 1964 to 1980). The actual preparation took some 25 years and when first mooted in 1954 merited a fourth leader in *The Times*. *Flora Europaea* is a compendium which provides a concise synthesis of our knowledge about the characteristics and distribution, country by country, of all the flowering plants and ferns known to grow wild, either native or introduced and established, in Europe. It has provided botanists and other users with a standard treatment and a database for future research. The decision of the editorial committee in 1983 to undertake a revision of the first volume, originally published in 1964, came as something of a surprise to many people. The background to this decision and the world context of the project sheds light on the ways in which our knowledge and exploitation of plant resources have developed.



The frontispiece from Linnaeus's *Flora Lapponica* (1737)

Revising the botanists' bible

in a computerized system. In contrast it is often impossible to map tropical species even on a 100km grid because they are so poorly known. If this were just a matter of academic science there would be no cause for wider concern, but the fact is that floristic work leading to the writing of *Floras* is a necessary precursor for resource assessment, management and conservation.

No longer can taxonomists work as though there was all the time in the world to complete the inventory

The preparation of a *Flora* is, in effect, the basic step in the inventorying of plant genetic resources, as recognized in the last century during the period of colonial development but subsequently, with the rise of agriculture, largely forgotten. The increasing realization during the past decade of the extent to which the natural vegetation of many parts of the world, especially the tropics, is being destroyed or modified by man's activities with the consequent loss for ever of thousands of species, known or unknown, that form part of man's floristic birthright, to use A. J. Gentry's apt phrase, had added a sense of urgency to the situation.

Even the Amazon rainforests which have been regarded as secure, simply because of their vast extent, are being lost according to the latest estimates at a rate of 1 per cent per annum so that within 20 to 30 years there will have gone. No longer can taxonomists work as though there was all the time in the world to complete the inventory; the timescale has been dramatically shortened. We now have 10, 20 or 30 years at most in which to complete the sampling and take whatever conservation steps are necessary or feasible to preserve part of this for future generations.

Because they have the (zoo)nomie manpower and resources, it falls to the temperate countries to make most of the sampling. The European flora does

not in these circumstances rate a very high priority and the revision of the first volume of *Flora Europaea* is a small-scale operation in terms of budget compared with the original project. Even so the publication of *Flora Europaea*, far from fossilizing European taxonomy, as some had predicted, stimulated a great deal of further work with the surprising consequence that preliminary estimates indicate that a 10 per cent increase in the size of volume one will be needed to accommodate the large number of additional species and sub-species that will have to be included.

The need for more detailed and accurate data on the distribution of European plants led to a separate but associated project, *Atlas Florae Europaeae*, based in Helsinki which aims to provide distribution maps for each species on a 50km grid. The preparation of this atlas has led to a revision of some of the data in the parent work with most of the novelties and changes referring to Mediterranean and southern Europe, especially Spain and Greece, neither of which possesses a modern national *Flora*.

An international project to write a checklist of the whole of the Mediterranean basin's flora was begun some five years ago and the first volume has just been published (*Med Checklist*, 1984). An interesting feature of *Med-Checklist* is that its compilation has involved a computerized

database and the actual publication is photo-typeset. The use of computer technology in the preparation of *Flora* is a recent development and only a few examples are known and even then only some of the data are handled in this way. Examples are the *Flora of Kelapa*, State of Veracruz, Mexico, begun some eight years ago and the *Flora of North America* which has recently been restarted after the failure of earlier attempts.

There has, in fact, been very little change in the design and presentation of *Floras* since the last century but it is likely that advances in information technology will lead to a radical reappraisal of the ways in which taxonomic data are stored, handled and presented. One of the difficulties about conventional *Floras* is that they are labour-intensive, take a long time to compile, and are expensive to produce and publish. As a result they have to last a long time and the data they contain rapidly become out-of-date. They make no provision for alternative classifications. Ongoing databases are much more flexible: they allow for regular updating, selective printouts of data, the holding of alternative classifications and also a wider range of data than the conventional *Flora*.

There are few major projects of this type so far: the European Taxonomic Floristic Biosystematic Documentation System, sponsored by the European Science Foundation, at Reading; the Viciac database at Southampton which covers a range of information on vetches, beans and other legumes; the conservation database at the IUCN Conservation Monitoring Centre at Kew and Cambridge; and the *Flora of North America* project are examples and others are being planned.

The Council of Europe held a meeting in Strasbourg last month on the use of databases in conservation, at which many examples ranging from local to international were presented, and at the first meeting of the FAO Commission on Plant Genetic Resources in Rome in March this year a major topic on the agenda was information and database systems. The database concept is clearly now widespread among the users of systematic information, both pure and applied.

Floristics and *Flora*-writing may now appear to be the most academically exciting aspect of plant systematics and in some ways have more in common with information science than with mainstream biology. Yet it is the field in which most professional taxonomists are engaged and some idea of the enormous range of activity involved can be obtained from the recently published *Guide to the Standard Floras of the World* by D. G. Frodin (Cambridge 1985) which in 619 pages gives an annotated bibliography of the principal *Floras* and checklists of the world.

The greatest demand for taxonomic and floristic information today comes from those working in the fields of genetic resource assessment and the conservation of these resources, either *in situ* through biosphere reserves or other such areas or *ex situ* in gene banks or reserve collections in botanic gardens. Once again taxonomy, which from its earliest beginnings has had a practical role, is seen as a major tool in economic development.

The author is professor and head of the department of botany in the University of Reading.



Computer technology used for compiling *Med-Checklist*

	Worldwide	Tropical	Tropical	Tropical	Europe
Flowering plants	250,000	180,000	30,000	35,000	95,000
Fungi	120,000	80,000	20,000	20,000	50,000
Ferns	12,000	11,000	1,000	8,000	5,000
Mosses	14,000	9,000	1,500	2,000	1,100

Distribution of plant species throughout the world

To admirers of Umberto Eco's novel *The Name of the Rose* it comes as no surprise to learn that the book is the product of a life-long interest in medieval thought. Few novels, if any, have brought the cultural and intellectual world of the high middle ages, or of any other historical period, so successfully to life. What is less obvious is that the book is also closely connected to the subject in which Eco first made himself an international reputation, semiotics or the theory of signs. The recent publication in English of Eco's own notes on his novel (*Reflections on The Name of the Rose*, Secker & Warburg, £4.95) makes it a particularly appropriate moment to discuss this topic; for although the notes show clearly that this connection is an important one for him, characteristically, and in accordance with most modern literary theory, they do not spell it out, or explain its implications for the interpretation of the book.

Umberto Eco's work before and after the *Name of the Rose* can be divided into theoretical and practical parts. These are closely connected; in fact a remarkable degree of coherence has characterized the whole of Eco's writing. But the two parts correspond roughly to two sides of the novel: on the one hand the detective-story plot, on the other the background of ideas and issues against which the plot takes place. The first, corresponding to Eco's theoretical interests, concerns the solution of a series of murders in a Benedictine monastery in the north of Italy by a Holmes-like English Franciscan, William of Baskerville, a solution which involves the location of the lost second book of Aristotle's poetics in a hidden chamber at the heart of the monastery's mysterious, labyrinthine library, and which leads to the destruction by fire of the library and the rest of the monastery buildings. The second, corresponding more to Eco's practical interests, concerns the clash of opposed fanaticisms, those of the Avignon Papacy and the exponents of the Franciscan mendicant ideal, on the issue of apostolic poverty, and the attitude towards this clash displayed by William of Baskerville.

Eco's theory has been mainly concerned with what he calls general semiotics. All forms of social, cultural and intellectual life can be viewed as forms of communication, and therefore as verbal or non-verbal languages or as systems of signs. The task of general semiotics, for Eco is to develop a single, comprehensive conceptual framework within which all these sign systems may be studied. In his all-embracing, systematic character Eco's general semiotics has more than a little in common with the philosophical system of Thomas Aquinas, on whose aesthetics he wrote his doctoral thesis and first published book. But a major difference between Eco's theory and most philosophical systems is his distinctive insistence that the theory makes no claim to represent the real nature of things. The disorder, instability and essential incomprehensibility of the world has been a recurrent theme of his work since *Opera aperta* (The Open Work), a "pre-semiotic" book, by his own account, published in 1962. The theme lies behind the title and much of the argument of his first semiotic volume, *La struttura aperta* (The Open Structure) of 1968, which, while taking over many of the fundamentals of structuralist thought, maintains that structures are "methodological" rather than "ontological" in character: they are provisional, hypothetical products of the mind, and at most only partially reflect the complex nature of things. The ultimate truth, the structure behind all structures, is permanently absent, beyond our intellectual grasp.

The combination of an urge towards system with the sense of disorder, instability and incomprehensibility has determined most of the characteristic features of Eco's general semiotics, and in particular three concepts to which he attaches considerable weight: *unlimited semiosis*, *encyclopaedia* and *abduction*. These figures largely both in *A Theory of Semiotics* and in Eco's most recent theoretical work, notably *Semiotics and the Philosophy of Language*, published last year, and *The Sign of Three—Dupin, Holmes, Peirce*, edited jointly with Thomas A. Sebeok in 1983. As the title of the last book may suggest, the concepts are directly

Reading between the signs

relevant to understanding *The Name of the Rose*.

The principle of unlimited semiosis, which derives from the American philosopher C. S. Peirce, is according to Eco vital to the constitution of semiotics as an academic discipline. According to this principle, the meaning of any sign, both verbal and non-verbal, can only be seen as another sign or signs (its "interpretants"), in Peirce's terminology, the meaning of which, in turn, can only be seen as yet another sign or signs, and so on *ad infinitum*. Meaning is an infinite regress within a closed sphere, a sort of parallel universe related in various ways to the "real" world, but not directly connected to it; there is no immediate contact between the world of signs and the world of the things they refer to. Eco thus frees the study of signs from involvement with the study of their referents, and lays the foundations for an autonomous science of semiotics by justifying the analysis of sign-systems in terms specific to them, without interference, at least in the first instance, from other systems may be studied.

This view has much in common with the Saussurean axiom that meaning is the product of structure and with the structuralist semantic theories derived from it, theories of which Eco himself has made some use. Its advantage for him is that it avoids the connotations of stability and organization that the concept of structure carries with it, and



Umberto Eco... acute, entertaining, often extremely funny

makes greater allowance for the shifting, elusive nature of our knowledge of the world. For the same sort of reasons Eco uses the notion of encyclopaedia in place of the structuralist notion of code, to stand for the knowledge or competence that allows people to use signs to communicate. The notion of code implies a view of this competence as a set of one-to-one equivalences between expression and content, signifier and signified. In contrast the encyclopaedia, as Eco conceives it, is much more complex and variable; it is like a net, a rhizome—a tangled clump of bulbs and tubers—or a labyrinth, a vast aggregation of units of meaning between which an infinite variety of connections can be made.

With the notion of code, communication is simply a matter of recognizing the one-to-one equivalences. With that of encyclopaedia, it becomes a matter of tracing out one of all the possible paths that can be taken through the network, rhizome or labyrinth, and it is for this process that Eco uses Peirce's term abduction. The example par excellence of abduction is the act of criminal detection. Eco's argument is that, just as the detective finds the author of a crime by postulating certain rules concerning the connections between human motives and actions and physical events, so in the normal processes of communication we find the meaning of a sign by postulating certain rules concerning the relationship between that sign and

others. Both cases involve finding one's way through the labyrinth; in the latter case the rule may be more regularly applied (it may be "over-coded"), but the difference is only one of degree, not of kind. All forms of communication, interpretation and understanding are by their nature, for Eco, tentative and hazardous acts of inference.

At the very start of Eco's notes on his novel the connection is made clear between its title and the principle of unlimited semiosis, although the point is not spelled out. The reference to the rose in the Latin hexameter with which the narrative ends ("The former rose survives in its name; bare names are what we have") seems to assert for Eco the unbridgeable gap between the world of signs and the world of things. On the other hand there is also, clearly, a contrast between the picture of instability, disorder and incomprehensibility offered by Eco's view of semiotics in particular and knowledge in general, and the stable, ordered world of the monastery in which the story is set. Eco himself points out in the notes that the labyrinth of the monastery library is not the same as the rhizome-like labyrinth or net of the encyclopaedia. Far from permitting an infinite variety of possible connections, it is a labyrinth through which there is only one path, a material which we may take it, of the intellectual world of the books it contains and the monastic community it serves. We

can read the burning down of the library at the end of the novel as anticipating, metaphorically, the final destruction of this world, already seriously threatened, as Eco's characters repeatedly observe, by the new culture of the cities and their secular universities.

To say that the Holmes-like William of Baskerville represents the modern world which replaces that of the monastery is to put it rather crudely, but he does display a striking acquaintance with semiotic theory (according to Eco's notes Franciscan thought of the period shows considerable awareness of the nature of signs) as well as a characteristically modern view, as Eco sees it, of knowledge in general. Not only does he illustrate exemplarily the essential nature of all semiotic processes according to Eco; he also proposes a theory of detection strikingly similar to Eco's and Peirce's, repeating verbatim Sir Peter Medawar's definition in *The Sign of Three*. More generally he seems to share Eco's view of the essentially unknowable nature of things and of the provincial, hypothetical nature of the structures we build in them.

"Relations," Williams says at one point in the novel, "are the ways in which my mind perceives the connections between separate things, but what guarantee is there that these ways are universal and stable?" This doubt is confirmed for him by his discovery, at the end of the book, that the scene of murders was not the product of a single design drawn, as he had supposed, but was in large part determined by chance; "I behaved," he says, "like an obstinate man, following an appearance of order, when there is no order in the universe." His final advice to his pupil, the narrator Adso of Melk, is that the "order which our mind imagines is like a net, or a ladder, or something"; but, William quotes a Wittgensteinian "mystic" from Adso's land of Austria, "one must not speak throw the ladder away, as soon as one has climbed up it". Unlike his pupil and the rest of the characters in the book, William is aware, as Eco thinks the notes, that our knowledge of reality is a rhizome-like labyrinth and that no single path through it can be said to constitute the truth.

The author teaches in the faculty of medieval and modern languages and literature in the University of Oxford.

A man waging war with the mass media



What were they and what symbols message did they communicate? Like three, aristocratic pairs of lions rampant like arches... (Also of Melk in The Name of the Rose)

Eco's general semiotics can sound more unworriedly and abstract than it actually is, for throughout his career he has also been constantly interested in concrete social and cultural issues, and has taken great pains to relate his theorizing directly to them; the Wittgensteinian ladder is for him a means of involvement in the real practical problems of the modern world. The principal justification of a general semiotic theory is its relevance to specific fields of semiotic analysis, and thus, above all, its usefulness as a form of social and cultural criticism. This usefulness lies in semiotics' ability to expose the manipulation by commercial and political interests of forms of mass communication such as television, popular literature, advertising, political rhetoric and the press. Semiotics can show the ideological, in the sense of false, nature of the messages generated by the mass media when they suppress parts of the meaning of signs and privilege others to further the purposes of specific interest-groups; a process Eco terms "code-switching". The practical power of semiotics lies in its ability to show how far messages overclaim or distort our knowledge of the world, whether they "respect or betray" the real complexity of the sign systems that constitute our culture.

Eco thus sees himself engaged in a form of permanent hermetic guerrilla warfare against the world of mass communication. In the case of an awareness of the complexities, ambiguities and nuances of life and a healthy suspicion towards the mass

media to which the public is subjected. Semiotics for him is associated with a liberal, democratic, open-minded and tolerant attitude to politics and culture; it "helps us to analyse different ideological choices", but "does not help us to choose". It means in particular a hostility to any fixed system of thought or belief, since any such system must necessarily misrepresent the real nature of our knowledge of the world. In this connection Eco attaches special value to humour and laughter, because they serve a vital demystifying function, and make a healthy assault on established forms of authority; laughter is the "instrument with which the secret innovator places in doubt that which a society holds to be good".

These principles and attitudes have governed the social and cultural criticism Eco has produced over the years in many books and scholarly articles—including an analysis of Fleming's James Bond novels—and in a constant stream of acute, entertaining and often extremely funny journalistic pieces in Italian dailies and weeklies. They are also the inspiration of *The Name of the Rose*, the novel which deals with the subject of comedy, because of its potentially corrupting and subversive effect; its danger was that it made laughter respectable. William's response to it is a polemic that is wholly typical of Eco's view of his practical duty as an intellectual: "Perhaps the task of the man who loves other men is to make them laugh about the truth, because the only truth is to learn to free ourselves from the insane passion for the truth."

In the face of the conflict between the savagely oppressive representatives of the Papacy and the equally narrow and intolerant Franciscans

BOOKS

An end to science?

by John Passmore

The Limits of Science
by Peter Medawar
Oxford University Press, £7.50
ISBN 0 19 217744 3
The Limits of Science
by Nicholas Rescher
University of California Press, £27.50
ISBN 0 520 05180 7

Two books with but a single title, but very different in content and texture. Only the last of the three sections into which Sir Peter Medawar divides his book directly relates to his titular theme. The first section is a set of aphorisms on science and its place in human culture, the second an essay on lack of science. They are the mixture as before: robust good sense, Popper-style anti-inductivism, authoritative scientific examples. Even the third section, more continuously argued, is neither closely woven nor philosophically deep. Medawar's book as a whole is only short—in itself, as he says, a "one-but-alright".

Professor Nicholas Rescher, in contrast, has written yet another of his highly professional, closely-argued monographs. To be sure, his structure, too, is not wholly orthodox. The chapters are strangely independent, without inhibition against repetition. It must be by some sort of publishing confusion that a long quotation appears twice on the one page, in text and in a footnote. It is a confusion facilitated by the recurrent feeling that Rescher has repeated himself, even when closer inspection usually reveals that this is not quite literally so. Several of his chapters, furthermore, are summaries of the main themes in his recent books on cognate topics. These two tactics, repetition and summary, serve to hammer home the central points in the "methodological pragmatism" to which Rescher has lately committed himself. But this is at the cost of detail.

On one point, both authors agree: science certainly has limits in so far as normal human beings have many different interests, and science satisfies only some of them. We do not turn to it, they emphasize, when we want to know how to read a poem, to solve a political dispute or a moral dilemma; of itself, one might add, it does not tell us how to build a television set—although the bad habit of describing

technology as "applied science" disguises that fact. The only question, as they see it, is whether there are any limits to the capacity of science to continue to supply us with fresh knowledge in those areas where it is clearly competent.

Rescher discusses three such possible limits: domain limits, temporal limits and economic limits. Medawar concentrates on the first of these. On economic limits, Rescher's main point—more fully developed in his *Scientific Progress* (Oxford University Press, 1978)—is that scientific progress depends to an ever-increasing degree on sophisticated technology, the cost of which, increasing exponentially as science advances, may finally bring research to a halt. So the half-millennium beginning about 1650 may come to be thought of as, uniquely, the Age of Science.

Rescher's argument can by no means be dismissed as an absurd example of *fin de siècle* pessimism. We are already witnessing a growing reluctance on the part of governments to support any but "mission-directed" research; if such missions did not include the construction of new weapons, that reluctance would be still more evident. Of course, what might rather happen is that emphases will shift; there is a great deal to be learnt, not at vast expense, about the visible world around us. But Rescher is right enough; there would then no longer be a fresh flow of information on what has traditionally been regarded as the fundamental problems of science, whether in particle physics or astrophysics.

Economic limits, however, are external; temporal and domain limits are internal. Rescher devotes most of his attention to temporal limits. For more than a century past, distinguished scientists have from time to time asserted, always with extraordinary relish, that science had a terminal point, then being approached, at which it would have a complete knowledge of scientific laws, nothing remaining except in a favourite metaphor to refine a few decimal points. Rescher's counter-argument does not rest, as many counter-arguments to this thesis have rested, on the doctrine that nature is infinitely complex in a manner which defeats any attempt to give a complete account of it. It is the nature of science, he says, not the nature of the world, which guarantees that, economic limits

apart, science will always have important new things to tell us.

Science, he argues in the spirit of much post-Popperian philosophy of science, is always "defeasible and transitory". It is the best we can do at a particular point of time, inevitably to be swept aside by a different set of theories; and they in turn by still another set. There is no possibility of this process some day terminating because science has finally reached "the truth". Even if science could reach a point at which it could answer all the questions anyone was then asking, the conclusion would not follow, Rescher tells us, that it had answered all the questions there are. There are always questions which, operating with the information and the theories at their disposal, scientists cannot possibly ask, as Darwin could not ask whether all DNA served a function or whether some of it is "junk". An innovator can always introduce new concepts in a way which raises fresh questions and hence creates new work for scientists.

The philosophy of science on which Rescher is here drawing relies heavily on history. What in the past were regarded as well-established theories, Rescher likes to insist, we now regard as mistaken. It cannot correctly be maintained, as often used to be argued, that the new theory is simply a better theory which includes the old theory as a special case. Darwin's theory, Rescher points out, is not simply a wider theory than Lamarck's; modern theories of combustion correct, they do not simply broaden, the phlogiston theory. If Einstein is right, on some issues Newton is simply wrong. There is no good reason, he adds, for believing that the situation is now different, that present-day theories could not possibly be overturned. Like all previous theories, they rely on particular data which they have derived in a particular way and interpret in the light of particular existing theories, inevitably going beyond such data in the process of theory construction. There is plenty of room for them to be seriously mistaken.

Must we then abandon the view that, unlike art or philosophy, science is the supreme example of a form of activity which unambiguously makes progress? Some would reply that science, progress in the sense that we now have at our disposal a vast amount of useful information—reliable in-



Sir Peter Medawar

formation—which was not available in pre-scientific days. Rescher's answer is more pragmatic terms. (The widespread return to pragmatism is the most striking feature of contemporary American philosophical life, in its porousness to the renewed emphasis on external verities which marks its political life.)

It runs like this: science offers us, as none of its competitors offers us, an ever-increasing power to predict and control. This power is evidenced at the level of everyday observation; such observations can survive the meaning-shifts characteristic of science. Theories of vision, or electronics, may take a new shape but the television set remains; only the hypothetical scientific world question whether by turning a knob we can now see what is happening somewhere else and once could not do so. This is true and important. But do not such permanent technological successes, one might still ask Rescher, rest on permanent scientific discoveries? Would it not be as absurd to question whether there are semiconductors as it would be to question whether there are atoms? Calculations which once lay beyond our powers; as absurd to question whether DNA played some role in genetic inheritance as to question whether biologists can now make interferon?

I can sympathize with Rescher's general view that the ideal of a completed science is rendered untenable by the very nature of scientific activity because they rest on false assumptions, such assumptions as that there must be a point to living in general as distinct from a particular point in a particular person's living, a point differing from person to person. Rescher does not accept any of these solutions. Science, he says, can answer such questions.

How, exactly? Here Rescher takes his cue from the Canadian philosopher John Leslie. We can explain, he tells us, why anything comes into being—the most fundamental of ultimate questions—with the reply "because it is fitting". And if we are then asked why what is fitting should exist we can give the same reply: because it is fitting. It is quite arbitrary, he says, to set the boundaries of science at a point which rules out such answers as "unscientific". But is it? "Because it is fitting" has always been the typical reply of the obscurantist, trying to block critical inquiry. If Darwin had been content with it, if scientists had been content with it, important forms of inquiry would never have got going. To admit such an answer as "scientific" is not to broaden science but to destroy it.

These aberrations apart, there is much in Rescher's book—as indeed there is in Medawar's—to deserve the reader's attention. In particular, Rescher's explanation why it is absurd to expect extra-terrestrial beings, even if there are any, to develop a science or technology at all like ours should help to dispel a great deal of nonsense.

Of course, Medawar would not doubt agree what was once not scientific knowledge can finally come to be scientific knowledge, as it—or something we are prepared to count as its equivalent—turns out to be deducible from general laws. But it would certainly be rash to conclude that we shall some day be able, to deduce from general laws that, let us say, there is a

frog in South Australia which swallows its fertilized eggs and gestates its young in its stomach. So, even at the level of knowledge, science has marked limits, if Medawar's definition of science is accepted.

Wanting to retain as much as possible within science, Rescher on the contrary argues that there is no reason to draw the boundaries of science at a point at which we exclude the unpredictable. But if prediction and control are the signs of scientific progress, does this mean, one naturally asks, that there are kinds of science in which there can be no progress? What, then, observations can survive the meaning-shifts characteristic of science. Theories of vision, or electronics, may take a new shape but the television set remains; only the hypothetical scientific world question whether by turning a knob we can now see what is happening somewhere else and once could not do so. This is true and important. But do not such permanent technological successes, one might still ask Rescher, rest on permanent scientific discoveries? Would it not be as absurd to question whether there are semiconductors as it would be to question whether there are atoms? Calculations which once lay beyond our powers; as absurd to question whether DNA played some role in genetic inheritance as to question whether biologists can now make interferon?

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John Passmore is a visiting fellow in the History of Ideas Unit and emeritus professor of philosophy at the Australian National University, and a visiting professor in Russell studies at McMaster University.

Objective evaluation

Baselard's Science and Objectivity
by Mary Tiles
Cambridge University Press,
£20.00 and £7.95
ISBN 0 521 24803 5 and 28973 4

It seems undeniable that we know far more of the physical world than we did just a hundred years ago. Science employs rational methods of inquiry and makes rapid progress. On what basis can we judge that our current best theories are better than their predecessors?

The natural answer—that they are more successful at predicting observational facts—and provide more satisfying, more effective explanations—seems to require that we can step back from the theories being evaluated, comparing them in the light of the theory-neutral facts of observation. Much analytic philosophy of science attempts to take up this neutral perspective, describing the goals of science and the relations of theory to observation, and hence justifying our practice of evaluating theories.

Recent doubt has been cast upon this picture. As science progresses, so does our conception of its aims—of what counts as an adequate explanation. And the observations we ourselves test theories are themselves not free from the past part, we do not test theories against the results of purely uncoloured observation; rather, they are tested against experimental

phenomena, reflecting techniques of purification, observation and measurement, the adequacy of which themselves require theoretical defence. Rational standards and facts of observations are not available from the neutral perspective, but can only be understood from the standpoint of particular theories. If theories differ in their conceptions of the aims of inquiry, or in their descriptions of the observable facts, how can they be compared?

Some conclude that scientists deceive themselves about the rationality of their methods of inquiry. Others, like Thomas Kuhn, seem to find progress only in the instrumental values of discoveries for technology and engineering. Gaston Bachelard—a French philosopher of science, now active during the interwar years and known to British readers largely through his influence on French thinkers like Althusser and Foucault—cannot so readily give up the idea that science makes progress and seeks objectivity. As Mary Tiles reports, he offers accounts of rationality and objectivity which enable us to find progress in developments that challenge observational facts and principles of intelligibility previously taken for granted. Such changes manifest science, he argues, they do not threaten it.

Bachelard defends a constructivist view of mathematics—mathematical objects are, in some sense, our creations, and our concepts of them change through time. But objectivity is not wholly lacking. When we formalize mathematical theories, attempting to remove errors and contradictions from pre-existing informal practices, we are constrained by the nature of those practices and the goals they have in view. Mathematical progress stems

from a desire for greater unification and generality. Informally at first, we construct broader structures, and treat the familiar ones as special determinations of them. In so doing we are constrained by the need to preserve the properties of the familiar structures.

And in so doing we also pose new broader questions for science. As non-Euclidean geometries are developed, it becomes a question whether the geometry of space is Euclidean. The development of theories from common sense, and progress within science, display "ruptures, standards of intelligibility are violated, familiar concepts are radically transformed. Objectivity is preserved because part of our justification for such changes consists in showing that what has been rejected can now be seen as 'subjective', as reflecting our limitations of interest, perspective or understanding. We advance towards objectivity by identifying and dismissing subjective distortions.

Tiles interprets Bachelard through the eyes of an analytic philosopher, and admits that his philosophical outlook is transformed through this process. The book contains little direct quotation, and offers little of the flavour of his writings, although its interesting discussions of examples of theoretical change draw on Bachelard's own treatment of them. It is useful to have this introduction to the work of a challenging and ignored thinker.

Christopher Hookway

Christopher Hookway is lecturer in philosophy at the University of Birmingham.

Basil Blackwell

The Evolution of Law

ALAN WATSON

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BOOKS

LAW

Out of harm's way

Harm to Others: the moral limits of the criminal law
by Joel Feinberg
Cambridge University Press, £22.50
ISBN 0 19 503409 0

Harm to Others is the first of a projected four-volume work on the moral limits of the criminal law. The emphasis of the work as a whole is to be on the principles which states may not follow in legislating criminal penalties; this volume however concentrates on the central objective which the author believes may legitimate the criminalization of conduct, namely the prevention of harm to persons other than the actor.

The echoes of John Stuart Mill are clear and acknowledged throughout

Mortal issues

Law, Ethics and Medicine: studies in medical law
by P. D. G. Skegg
Clarendon Press: Oxford University Press, £25.00
ISBN 0 19 825365 6

Long before it came a fashionable bandwagon, medical law benefited from the careful and useful investigations of Peter Skegg, an academic lawyer who has recently returned to a chair of law in his native New Zealand. *Law, Ethics and Medicine*, particularly on questions of consent and death, formed a valuable core of what was then a rather esoteric and speculative area of legal activity. Now, of course, all is changed utterly and there has been a positive flurry of activity.

Law, Ethics and Medicine deals with some, if not all, of the issues which dominate contemporary medico-legal debate. We progress from womb to grave, with discussions of the hazards in between. There is a short and succinct treatment of abortion and of some of the little-considered legal problems associated with the protection, or lack of protection, of the foetus; there is a very long discussion of the law relating to consent, including a restatement of Skegg's most useful earlier article on doctors who treat patients without consent; and there is a full and closely-argued discussion of definitions of death.

These are all weighty and highly controversial matters. The ethical problems associated with abortion are sufficiently well-known as to not require any comment in this review, but even in the area of consent, which at one level is a fairly technical legal issue, there are philosophical problems of some profundity. Consent raises the issue of paternalism and goes therefore to the heart of the practice of medicine. In the United States the whole question has become an appalling legal mess, and the prospect of such confusion on this side of the Atlantic has been much to the fore of lawyers' minds. The recent decision in the *Slavov* case, along with one or two other recent cases, has not improved English law on this question and there appears to be a fundamental confusion in the minds of some judges as to what the law relating to consent is or should be. Skegg's penetrating and clear analysis of the law pre-*Slavov* would help any confused onlooker.

The same care is shown when it comes to the discussion of death. Most readers of this journal may believe that death is a simple matter and that one is either dead or alive. This, unfortunately, is not so, at least so far as lawyers and philosophers are concerned. In the past the law looked upon death as a fact, and its cessation meant death. Technology, however, has introduced the waters of doubt into the definition of death.

the book as are themes already expounded by Feinberg in influential articles and papers. Feinberg goes along with Mill in allowing some place for the prevention of offence to others as a *prima facie* reason for criminalization, but rejecting both legal paternalism and legal moralism (the prevention of evil as such) and excluding also the conferment of benefit and the perfection of character as proper objectives of the criminal law. In so doing he is in general as uninterested as Mill in the use of the law to facilitate beneficial social and economic relationships (through licensing, fiscal redistribution, compensation, etc) which are explicated by the sanctions of the criminal law. By restricting his attention to "primary" crime where "punishment is used in the first instance" and taking for granted that imprisonment is the typical criminal sanction he bypasses expanding and controversial areas of the criminal law.

Refreshingly (but surprisingly for such an ambitious undertaking) Feinberg does not raise in a systematic way the standard range of theories on the nature and purpose of the criminal law. Mention is made of the serious personal consequences of a criminal conviction for the individual and emphasis is placed on the liberty-restricting character of penal law, but no sustained attention is given to the difference of the criminal law and we are not offered any general defence of Feinberg's qualified utilitarian rejection

of pure retributivism. These matters are allowed to emerge in the course of the clarification of the key concepts of "harm", "interest" and "right", a task at which Feinberg is adept and persuasive. In practice a simplistic utilitarian starting-point is subsequently modified by an array of ad hoc intuitions which the author does not attempt to integrate into a total moral and political theory.

After all that has been written about the nebulousness of Mill's harm principle and its evident evaluative undertones, Feinberg has to convince his readers that the notion of "harm" refers to something more precise than that which we are prepared to see prevented by the use of coercive sanctions. He approaches this task with a neat combination of appeals to ordinary usage and more specialized attention to the uses of "harm" and related terms in the context of the harm principle itself. The latter method comes perilously close to saying that for the purpose of the harm principle we only count those common usage harms which we think serious enough to prevent by the threat of imprisonment. The linguistic approach has more conceptual independence but once we have distinguished "harm" from "hurt" and taken into account its association with impairment and ulterior personal objectives, it is still unhelpfully open-ended as a key to the limitation of state intervention in society. It may be correct to say

that I am not really "harm" if I suffer severe but temporary pain but is this really all that legislation relevant? In Feinberg's version of the harm principle what matters is the avoidance of "set-backs" to the interests of others if these are wrongs, that is if they are intentionally or recklessly inflicted, and infringe rights (that is valid moral claims) without the victim's consent. In this way allowance is made for retributivist objections to the punishment of unintended harm and the liberal assumption of the significance of consent. Here Feinberg misleadingly introduces the legal principle of *volenti non fit iniuria* which is a principle of civil not of criminal law. Feinberg makes a host of useful and clear distinctions and conducts illuminating discussions on such matters as the duty to rescue, the analysis of causality in the attribution of responsibility and the prospect of criminalising films which give rise to "imitative" crimes. Important work is also done in specifying the weights which are to be given to different harms when they conflict with each other or with other values. However, the book as a whole lacks structure and is in effect a series of sophisticated invitations to the reader to share the legislative hunches of its author.

T. D. Campbell

T. D. Campbell is professor of jurisprudence at the University of Glasgow.

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BOOKS

LAW

Police powers

A Guide to the Police and Criminal Evidence Act 1984
by Vaughan Bavan and Ken Lidstone
Butterworths, £19.50
ISBN 0 406 01430 2

It is strange to reflect that for many years there existed no scholarly monograph on police powers to set beside the eminently practical Moriarty's *Police Law*. When such a work did appear a decade ago it did not lead to rival publications. Yet, on many a score, police powers would seem to have been an ideal subject for academic treatment. The law of arrest, search and seizure, and interrogation to be found in a mass of case law with only sporadic interventions by Parliament. Full of human interest and frequently difficult to reconcile, the reported cases seemed fertile ground for the legal academic to indulge his love of rationality by deriving order and principle from seeming chaos. Moreover the quality of the occasional judgment was not equal to the importance of the point of law to be decided.

All that has now changed. The enactment of the Police and Criminal Evidence Act 1984 has been the occasion of the publication of a number of studies. More are due to appear over the coming year. In contrast to the earlier jumble the new Act is clear and detailed, sometimes painfully so, spelling out some matters which could have been left to common sense.

The book by Bavan and Lidstone, both of the University of Sheffield, is one of the first of its kind. As the title suggests, its scope is closely circumscribed by the ambit of the Act. It is not a textbook of police powers, since the Act itself did not aim to codify the subject. Nor does it investigate such wider matters as, say, the constitutional position of the police, the review of chief constables' policy decisions, and the topical issue of telephone tapping. Apart from an introductory piece which takes on one side some concepts and themes which crop up throughout the Act, the divisions of the book correspond closely to those of the enactment.

The authors pick their way skilfully through the toughest parts of their task, the exposition of powers of entry, search and seizure, and arrest. The pre and post-Act law in these areas is compared most skilfully. Thereafter the terrain is less rugged. For example, exposition of the complaints procedures against the police requires a lesser degree of analytical skill: here the weight of procedural detail is lightened by the occasional flow chart.

Ample reference is made to the contents of the Act, principally the Report of the Royal Commission on Criminal Procedure, the Eleventh Report of the Criminal Law Revision Committee, and the original bill which preceded the dissolution of Parliament in 1983. Frequent hypothetical examples are given to illustrate how

the Act will work in detail. Bizarre ramifications of the drafting of the legislation (for example, allowing a road check in order to catch a person who has stolen a motor car from an old age pensioner) are matched by the occasional lacuna (a person who swallows incriminating material in order to frustrate an "intimate search" may not be coerced into an X-ray examination). The authors' treatment of the Act is particularly dispassionate when one considers the vehement opposition that it received.

Finally some criticisms must be made. At pages 256-7 and 336-7 of my copy part of the text has gone astray: we are now assured by the publishers that this fault is being rectified. The table of cases and the ample index do not entirely compensate for the lack of a table of statutory provisions. However, the authors have set a high standard of exposition, all the more remarkable for the speed with which the book has been produced. With the Act and the draft codes of practice appended to their account this book represents excellent value.

Joseph Jaconelli

Joseph Jaconelli is senior lecturer in law at the University of Manchester.

Friendly guides

Introduction to Legal Method, second edition

by John H. Farrar and Anthony M. Dugdale
Sweet & Maxwell, £10.75 and £6.50
ISBN 0 421 29770 0 and 29780 8
The Modern English Legal System
by P. F. Smith and S. H. Bailey
Sweet & Maxwell, £30.00 and £16.00
ISBN 0 421 27180 9 and 27190 6

The boom in legal education together with the interest generated by the media, particularly in such areas as consumer affairs and citizens' rights, have generated a mass of books on the English legal system or on the basic principles of English law.

One book which has stood out for many years is Glanville Williams' *Learning the Law*. Unlike most other books on the legal system or English law generally, it was never intended for use in any single course, nor, indeed, as a purely introductory book (though it remains a popular, and frequently recommended text for new law students). Instead, it was intended as a "guide, philosopher and friend" for the reader at every stage of his legal studies.

In his preface to the first edition of *Introduction to Legal Method* John Farrar acknowledged the debt he owes to *Learning the Law* and indicated several areas in which the two books differed. In particular, he claimed his approach on legal method in more detail. Also, he sought to relate law to its social background rather than to Glanville Williams. In the second edition, now aided by Anthony Dugdale, he seeks to consolidate that approach. New material, including some cases new chapters, is included on a variety of topics, and case law, legislation and codification in opera-

tion receive extended treatment: amendments to accommodate developments in case law and legislation have been made.

There is also a new development. Whereas the preface to the first edition was somewhat defensive in its claim that a text on legal method was both necessary and comprehensible to the first-year law student, the new edition aims at "liberalising introductory law courses, showing how lawyers think and helping students to think for themselves about legal issues, and supplementing books on the legal system". Nevertheless, I would have liked to see rather more on the European influence and on European Community law in particular. While certain of the issues arising here are of significance to constitutional lawyers primarily, there is scope for summarizing the main provisions of the European Communities Act, indicating how this has been judicially applied.

The treatment of public law, and its distinction from private law, is disappointing. Farrar and Dugdale correctly point out the technical and procedural elements — the fact that a system of judicial review must be invoked in cases where "public law" rights and duties are involved, as opposed to the normal civil process by means of which private rights are protected. However, the important principles of natural justice and reasonableness, which are utilized by the judges when they interpret the statutes conferring such "public law" rights and duties, are scarcely mentioned. Indeed, the rule of law itself is dismissed as a "vague concept" and dispatched to history, as far as domestic law is concerned.

Farrar and Dugdale lean a little too much towards theory. For instance, the historical background to the legal system and method is eschewed in favour of a series of jurisprudential theories which can, at best, be only skimpily discussed in such a book, and, in any case, are best left till the student has familiarized himself with some substantive law. More seriously the concern for an analytical, theoretical framework sometimes obscures the point under discussion — as with the significance of judicial "dicta", particularly those of the House of Lords.

Smith and Bailey's *The Modern English System* is a clearly written and readable book. Rather broader in scope than *Introduction to Legal Method*, it is also somewhat more conservative in approach. Thus, it contains extensive coverage of the hierarchy of courts, the legal profession, the major sources of law and its application, procedure, and so on. In addition it contains useful information on some less common topics. These include solving legal problems (with discussion of the work of law centres and other agencies offering legal assistance and advice) and post-trial procedure (sentencing, penal policy, civil remedies, as well as appeals and the judicial review). This makes *The Modern English System* rather more attractive to the general reader than some of the more established texts, while also appealing to the student. It contains enough detailed law to satisfy the demands of many courses in the English legal system. Like the *Introduction to Legal Method*, however, it contains little legal history.

Irving Stevens

Irving Stevens is lecturer in law at the University of Buckingham.

Getting fix

Controlled Drugs: law and practice
Richard Lord
Butterworths, £17.50
ISBN 0 406 01610 0

Many views the abuses of drugs as a social problem and brands the "pushers", especially the sellers (colloquially "pushers"), as criminals of the first kind. But it has not always been so. In the early days of the 19th century, regularly took drugs. The addict was not the young, middle class, indeed the use of drugs was not outlawed until the Dangerous Drugs Act of 1920. Lord's book provides a detailed account of the main provisions of the comprehensive 1971 Misuse of Drugs Act. After a brief account of the history of the drugs problem and the purposes of legislative intervention, the major part of the text is devoted to the exposition of the criminal offences involved. The offence of "being knowingly concerned in the production or supply of a controlled drug" is the subject of a whole chapter. Other sections deal with the offence of "producing" and "supplying" a controlled drug, "possession" and "permitting premises to be used for producing, and supplying or using controlled drugs".

In practice the courts are only too prepared to interpret the statutory provisions liberally. As Lord points out in the recent Court of Appeal decision, *Neal* (1983) 77 Cr. App. R. 283, the offence of "importation" seems to have been extended to include anyone "concerned with controlled drugs which have been imported". Similarly, in *Delgado* (1984) 1 W. L. R. 89, the same court interpreted "supply" to include "to include

the return of drugs to their owner by a defendant who was merely keeping them safe."

The problem of drug abuse cannot be overstated. According to Lord "Some 5 million people presently living in the United Kingdom have used controlled drugs at one time or another in their lives and of this a sizeable proportion use drugs regularly". Only a tiny fraction of the guilty parties are discovered. He concludes depressingly that "there is no doubt that the law as it stands is totally ineffective in preventing those who wish to take drugs from obtaining illicit supplies". Nevertheless this book will provide a handy and easily accessible account of the law in theory and practice. It includes an invaluable glossary of controlled drugs and an appendix setting out the legislation and associated material.

Andrew Grubb

Andrew Grubb is a law fellow at Fitzwilliam College, Cambridge.

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Kenny: Studying Law

1986. By Phillip H. Kenny, LL.B., Dip. C.L., LL.M., Solicitor, Head of the School of Law, Newcastle upon Tyne Polytechnic

Kenny's Studying Law is an invaluable guide which provides a great deal of information and advice for students of law. Starting with a discussion of the variety of law degrees available, the author then sets out a number of typical legal problems. By suggesting ways in which these might best be answered, he introduces you to the different teaching methods and to the variety of source materials you will need to use, and how to use them to best advantage. The book discusses how to prepare for and pass undergraduate and professional examinations. Many sample problems and essay questions are included, with suggested answers and explanatory notes.

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Second edition, 1986. By B. H. Bailey, LL.B., Lecturer in Law, D. J. Harris, LL.M., Ph.D., Professor of Law, and B. L. Jones, LL.B., Lecturer in Law, all of the University of Nottingham

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Hard cover £28.50 net approx Soft cover £19.95 net approx

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Second edition, 1986. Edited by P. F. Smith, BCL, LL.M., Lecturer in Law, University of Reading

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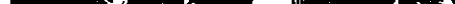
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New in paperback



The Manner of Dissecting

PESTILENTIAL BODY.

From now until May 25, the Wellcome Institute for History of Medicine is mounting an exhibition entitled "The Pest Anatomized" which considers five centuries of plague in western Europe. The exhibition, at 183 Euston Road, London NW1, is open Monday to Friday.

£20,433 from UKAEA (droplet measure-
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£149,327 from SERC (fluid flow tracing radiolabelled isotopes); also **£12,901 from Rolls Ltd** (ditto); **Dr R. W. Whitworth, £16,600** (SERC) (visiting fellowship: x-ray topography of dislocation in ice); **Dr W. P. Dodd, £4,750** (British Library) (feasibility study in information technology); **Dr J. A. Franklin and Dr Sheppard, £7,850** from Central Stimulus Health Authority Endowment Fund (for T3 to anterior pituitary nuclear receptor); **Professor J. M. Harrington, £9,800**

European Cancer Block (cancer mortality pattern in European countries). K. G. Docherty, £2,500 from MRC (injected xonopus oocytes and proinsulin). W. Jonaas, £4,680 from SERC (cancer meetings, 1985, 1986). Dr J. A. S. Sowers, £2,000 from Water Aid (treatment of algae at Whitlure).

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Rennie, £63,581 from Scottish
 Endowments Research Trust (metabolic
 using stable isotopes as tracers); Mr
 Gibson, £880 from Mason Medical
 Foundation (amino acid exchange as
 muscle protein balance in patients with

Appointments	
Universities	Technical Colleges
Fellowships	Colleges of
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Polytechnics Colleges of Higher Education Colleges with Teacher Education Colleges and Institutes of Technology	Departments of Art Administration Overseas Adult Education Librarians General Vacancies Industry and Commerce
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**LECTURER -
DEPARTMENT OF
PSYCHOLOGY**

Reference no. 13/01

Applicants should have had specialist training in both Animal Learning and Psychological Statistics. Experience in the use of laboratory computers is desirable.

Appointments to Lectureships are capped of leading to tenure but are usually probationary for three years.

18 May 1985.

University Chest (Vice-Chancellor) Council is responsible for the provision of the University of London, such heads a major central administrative (subject to the annual £22,630).

Further particulars Offices, Wellington should receive applications three referees, not less

**UNIVERSITY
OF
MANCHESTER
CHAIR OF
ECONOMETRICS**

Applications are invited from suitably qualified candidates, with interests in theoretical and applied econometric work, for the Chair of Econometrics in the Department of Econometrics and Social Statistics.

The Department is responsible for teaching and research in econometric theory, applied econometric theory, mathematical and quantitative economics, economic and social statistics, demography and computing for social scientists.

The University seeks a person with experience and standing in any area of econometrics, but would be an advantage if the appointee also had interests in some of the other aspects of the work of the department.

Further particulars may be obtained from the Registrar.

Applications should be sent to the Registrar.

and addresses of three referees should be submitted to the Registrar, the University, Manchester, M13 9PL, by 28 May. Please quote ref. 70N5728E (1756)

 **University of Manchester**
DEPARTMENT OF CHEMISTRY
'NEW BUILDING'

Applications are invited from 'New Blood' Lectureship. Candidates should have interests in the pro-Lazera, Section: Propagation in linear optical spectroscopy of from PhD candidates in other research will also be considered.

Salary on Lecturers scale (C7)

Applications forms and further information from Staff Office, University of Dundee, 100 Dundee Street, Dundee DD1 1TA.

Closing date for applications: 15th June 1994

**University of Wales
BUSINESS AND
ECONOMICS
LECTURER
OPERATIONAL
RESEARCH**

OR
ECONOMETRICS
(Ref. C44)

LECTURERS
(fixed-term 3 years)

Within the following areas:

- Banking
- International Finance
- Managerial/Industrial Economics
- Accounting
- Financial, Management, International
- Organisational Behaviour
- Operations Management
- Personnel Management
- International Management

MARKETING
(Ref. C41)

Requests (quoting Ref.) for details and application form to Staffing Office, UWIST, PO Box 88, Cardiff CF1 3XA.

Closing Date: 17 May 1985.

(72563)

**UNIVERSITY OF
BRADFORD**
Management Centre
**LECTURER
IN TECHNOLOGICAL
MANAGEMENT**
This new post will form part of the

subjects to undergraduate engineering students. Opportunities also exist to teach at postgraduate and post-experience levels at the Management Centre. Research interests should be in Technological Management and will be organised within the Centre's Postgraduate School. Candidates should hold a good honours degree, preferably in Engineering, although graduate scientists will be considered, with appropriate business and teaching experience. Salary on scales 7/25/20-E4826 p.a.

Applications (with further details from Dr Stephen Spencer, Post Ref: LMA/M/TM/TH, University of Bradford, Wakefield, Yorkshire BD1 1QP. Closing date 24 March 1985. Informal enquiries to Dr R P de la Mare.

(72599)

**University of
Essex**

Department of Law

LECTURESHIP

Applications are invited for a Lectureship in Law (salary scale £7,536 - £14,985, under review) for the next academic year 1 October 1989, on conditions with interest and a pension in accordance with the major fields of legal study.

Applications (can copies including a curriculum vitae and the names of two referees, should reach the Registrar, University of Essex, Wivenhoe Park, Colchester, CO4 3SQ, not later than 15 November 1988) may be obtained by request.

Polytechnics continued

Head of Department of Accounting and Finance

(Ref No L/18)
Grade VI Salary Scale £17387-£19170 per annum
Applications are invited for the post of Head of Department of Accounting and Finance in the Faculty of Accounting, Business and Management Studies.
Applicants should be members of one of the major accounting bodies with broad experience and interest in the theory and practice of the subject area. They should have a well established academic and professional standing in research, consultancy and teaching in at least one area of accounting and finance. Experience of a senior post in public sector higher education would be an advantage.
It is hoped to make an appointment with effect from 1 September 1985.

Head of Department of Design

(Ref No L/15)
Grade V Salary Scale £16088-£17877 per annum
Applications are invited for the post of Head of Design in the Faculty of Art and Design. The Department comprises of three schools: Ceramics, Fashion, and Three-Dimensional Design (Wood, Metal and Plastics).
Applicants should have an established reputation as practising designers and a broad well-developed interest in the theory and history of design. Organisational experience within higher education would be an advantage.
It is the intention to make an appointment with effect from 1 September 1985 or earlier by arrangement.

Head of Department of Economics & Social Science

(Ref No L/14)
Grade VI Salary Scale £17387-£19170 per annum
Applications are invited for the post of Head of Department of Economics & Social Science in the Faculty of Humanities, Social Science, Languages and Law. The Department comprises three sections: Economics, Politics and Sociology. Applicants should have a broad interest in the social sciences and a well established research and teaching reputation in one of the three fields represented in the Department. Organisational experience within higher education would be an advantage.
It is hoped to make an appointment with effect from 1 September 1985.

Further details and an application form, to be returned by 5 May 1985, please contact the Personnel Officer, Bristol Polytechnic, Coldharbour Lane, Frenchay, Bristol or ring 081 2028111.

Bristol Polytechnic



SCHOOL OF COMPUTING & INFORMATION TECHNOLOGY

PRINCIPAL LECTURER IN COMPUTING

Salary scale £13,095 - £16,467
Applications are invited from suitably qualified persons with substantial experience in education/industry/research who can contribute to the School's computing developments.
Further particulars from The Staffing Office, The Polytechnic, Wolverhampton WV1 1SB (tel: (0902) 710854 (ansaphone)).
Completed forms should be returned by 30th April 1985.

Professor/Head of School of Social Work

(Grade VI) £16,088-£17,877 p.a.
This post provides the leadership of a well-established and lively School of Social Work offering courses including a four-year honours degree, a postgraduate diploma, and a non-graduate certificate course.
The Head of School is expected to be a qualified social worker, with a distinguished academic record and proven experience in management. The title of Professor will be awarded to a successful candidate satisfying criteria relating to experience and research.
Informal enquiries to: Professor Edmund Pennington, Head of the Faculty of Social Science, or Mrs Ann Lundy, (acting head), School of Social Work, Middlesex Polytechnic, Queensway, Enfield, Middlesex, EN3 4DF. Telephone 01-864 8131.
Write enclosing a.s.e. (min. 51p x 4) and showing ref 3006. For further details and an application form: Personnel Office, Middlesex Polytechnic, 114, Chase Side, London N16 9PN. Closing date 3 May.

Middlesex Polytechnic

Department of Electrical, Electronic & Control Engineering and Department of Mechanical Engineering

READERS
The Polytechnic seeks to appoint a Reader in each of the above two Departments to lead, initiate, and co-ordinate research. Specific areas of interest are:
(1) Microelectronics, VLSI Design, Microprocessor and Software Engineering.
(2) Engineering Fluid Flow and Heat Transfer.
Candidates for appointment to these posts should have a proven record of scholarship in their field. A successful record of collaboration with industry and obtaining external funding would be an advantage.
Salary Scale: £13,095 to £16,467 (under review)
An application form and further particulars may be obtained from Personnel Officer, Sunderland Polytechnic, Langham Tower, Ryhope Road, Sunderland, SR2 7EE or telephone (0783) 76321 Ext. 11.
Closing date: 7 May 1985

SUNDERLAND POLYTECHNIC

FACULTY OF EDUCATION READER IN EDUCATION

Salary: £13,095 - £16,467 (under review)
Applications are invited for the above post, to sustain and encourage the growth of research across the full range of the Faculty's work. The person appointed will be expected to have a demonstrated track record in research and publication, in the supervision of research students and in the attraction of external funds. The Faculty already has active research groups working collaboratively with local teachers, and advisers in the fields of Primary Education, Multicultural Education and Vocational/Business Studies and Technology Education, and there are several research projects currently in these areas.
A person of exceptional abilities is sought for a position which will carry responsibility and opportunity for the exercise of considerable initiative.
An application form and further particulars may be obtained from Personnel Officer, Sunderland Polytechnic, Langham Tower, Ryhope Road, Sunderland, SR2 7EE or telephone (0783) 76321 Ext. 11.
Closing date: 3 May 1985

SUNDERLAND POLYTECHNIC

Bristol Polytechnic

Modern Languages Department

SENIOR LECTURER IN FRENCH

Good degree qualifications and experience of teaching French language and culture at degree level are essential. The Department has a B.A. (Hons) in Modern Languages Course, two postgraduate courses in French, and a newly approved three-year degree in French. The successful candidate will be expected to have a teaching and research interest in French language and culture, and to be able to contribute to the development of the Department's French language teaching.

Salary scale £11,775 - £13,725 p.a. (plus £1,175 p.a. for pension, £1,175 p.a. for gratuity, £1,175 p.a. for superannuation, £1,175 p.a. for housing, £1,175 p.a. for car, £1,175 p.a. for travel, £1,175 p.a. for other benefits).
For further details and an application form, to be returned by 5 May 1985, please contact the Personnel Officer, Bristol Polytechnic, Coldharbour Lane, Frenchay, Bristol or ring 081 2028111.

Coventry (Leicester) Polytechnic

Joint Appointment in the Faculty of Art and Design

LECTURER II/ SENIOR LECTURER IN PSYCHOLOGY

£7,548 - £10,095/£11,175 - £14,061 (plus April 1985 pay award)
He or she will work in the Department of Psychology and Applied Social Science, Coventry (Leicester) Polytechnic.
Applicants should have a good honours degree in psychology, and preferably a postgraduate qualification in the subject. They should have an interest in and an ability to teach psychology, and to contribute to the development of the Department's psychology teaching and research.
Further details and an application form may be obtained from the Personnel Officer, Coventry (Leicester) Polytechnic, 114, Chase Side, London N16 9PN. Closing date 3 May.

Coventry (Leicester) Polytechnic

Thames Polytechnic

School of Mathematics, Statistics and Computing

SENIOR RESEARCH ASSOCIATE IN INTELLIGENT KNOWLEDGE-BASED SYSTEMS

Needed for a team developing a pilot fault diagnosis system for the electricity supply industry as part of the Alvey Programme's large demonstration project in intelligent systems. The project will be directed by Dr. Max Brammer, Head of the School of Mathematics, Statistics and Computing. The post is temporary for 18 months, starting as soon as possible.

Salary up to £12,672 per annum inclusive.
Further particulars and application form from Dr. Max Brammer, Head of the School of Mathematics, Statistics and Computing, Thames Polytechnic, 114, Chase Side, London N16 9PN. Closing date 7 May 1985.

Sunderland Polytechnic

Faculty of Art and Design

PRINCIPAL LECTURER IN VISUAL INFORMATION DESIGN

Salary: £13,095 - £16,467 (under review)
The Polytechnic seeks to appoint a Principal Lecturer in Visual Information Design. Candidates should have a good honours degree in the subject, and a wide range of professional experience and skills, an ability to teach, and a commitment to the development of the Department's Visual Information Design teaching and research.
An application form and further particulars may be obtained from the Personnel Officer, Sunderland Polytechnic, Langham Tower, Ryhope Road, Sunderland, SR2 7EE or telephone (0783) 76321 Ext. 11.

Kingston Polytechnic

Faculty of Art and Design

ASSOCIATE LECTURER IN TECHNICAL ILLUSTRATION

A three-year limited tenure post, teaching three days a week and directing and supervising the work of a team of technical illustrators. The successful candidate will be required to teach and supervise the work of a team of technical illustrators, and to be responsible for the development of the Department's technical illustration teaching and research.
An application form and further particulars may be obtained from the Personnel Officer, Kingston Polytechnic, 114, Chase Side, London N16 9PN. Closing date 3 May.

Kingston Polytechnic

Academic Registry Assistant Registrar (Student Records)

Salary Scale £9477-£11025 per annum
A professional administrator with in-depth knowledge of computer based student record systems, FESR, fees and awards regulations is required to manage the student registration and record systems. There is an immediate need to further develop multi-alle computer applications, in close liaison with the Systems Analyst.
Ref. No. A/18.

Admissions Officer

Salary Scale £9477-£10107 per annum
Someone with expert knowledge of student admissions procedures and regulations is required to head the Admissions Office. The post has responsibility for the maintenance of the existing centralised, computer based service and its development in relation to PCAs and NAB requirements. In addition, the Admissions Office shares in the schools liaison activity over a wide geographical area.
Ref. No. A/17.

For both positions a relevant degree or equivalent, plus at least 3 years administrative experience in an institution of higher education is required.
For further details and an application form, to be returned by 2 May 1985, please contact the Personnel Officer, Bristol Polytechnic, Coldharbour Lane, Frenchay, Bristol or ring 081 2028111. Ext. 216 or 217.
Please quote appropriate Reference Numbers in all communications.

Bristol Polytechnic



NORTH STAFFORDSHIRE POLYTECHNIC

EDUCATIONAL DEVELOPMENT UNIT HEAD OF UNIT (New Post)

Salary Scale: Head of Dept. Grade V: £16,088-£17,877 p.a. (pay award pending).
To develop and co-ordinate internal emphases on learning and teaching and to link this with the Polytechnic's continued involvement in In-Service Teacher Education.
Application forms and further particulars may be obtained from the Personnel Officer, North Staffordshire Polytechnic, College Road, Stoke-on-Trent ST4 2DE.
Closing date for applications - 10th May, 1985.



Portsmouth Polytechnic

HEAD OF DEPARTMENT/ PROFESSOR OF MECHANICAL ENGINEERING

Applications are invited for the above post which becomes vacant on 30th April 1985 as a result of the retirement of the present Head. Applicants should have proven professional and research experience, a wide range of industrial contacts and an enthusiasm for engineering education. The successful candidate will be regarded as an academic leader, capable of developing the Department in a manner responsive to the impact of new technology on the rapidly changing role of mechanical engineering.

This is a Burnham Grade VI Head of Department post and it is expected that the successful candidate will merit the award of the title Professor.
Salary scale: £17387-£19170 per annum (under review)
Further particulars and application forms from the Personnel Office, (S13) Portsmouth Polytechnic, Nuffield Centre, St. Michaels Road, Portsmouth PO1 2ED. Tel: 0706-825451, to whom completed applications should be returned by 10th May 1985.

Middlesex Polytechnic

Faculty of Art and Design

ASSOCIATE LECTURER IN TECHNICAL ILLUSTRATION

A three-year limited tenure post, teaching three days a week and directing and supervising the work of a team of technical illustrators. The successful candidate will be required to teach and supervise the work of a team of technical illustrators, and to be responsible for the development of the Department's technical illustration teaching and research.
An application form and further particulars may be obtained from the Personnel Officer, Middlesex Polytechnic, 114, Chase Side, London N16 9PN. Closing date 3 May.

Middlesex Polytechnic

Kingston Polytechnic

Faculty of Art and Design

TEMPORARY LECTURER II IN FRENCH THEATRE STUDIES

Applications are invited for a one-year appointment (1st September 1985 to 31st August 1986) in French Theatre Studies. The successful candidate will be required to teach and supervise the work of a team of students, and to be responsible for the development of the Department's French Theatre Studies teaching and research.
An application form and further particulars may be obtained from the Personnel Officer, Kingston Polytechnic, 114, Chase Side, London N16 9PN. Closing date 3 May.

Kingston Polytechnic

Polytechnics continued

LANCASHIRE POLYTECHNIC at PRESTON

The Polytechnic Council invites applications for a Post of

Deputy Director

This is one of two Deputy Director Posts.

Salary in the range £24,348 - £25,227 (under review) (Burnham Group 12)

Closing date for receipt of completed applications 30th April, 1985.

For further particulars, please write to the Chief Administrative Officer, Lancashire Polytechnic, Preston, PR1 2TQ (0772) 22141 Ext 2800

LANCASHIRE POLYTECHNIC AT PRESTON

City of Birmingham Polytechnic

and West Midlands Regional Health Authority

LECTURER II/ SENIOR LECTURER (4 POSTS)

Ref No L/54
Department of Health Sciences

RESEARCH ASSOCIATE IN NURSING STUDIES (PRINCIPAL LECTURER SCALE)

Applications are invited for these posts from registered nurses with appropriate academic qualifications and experience in any area of nursing research. The successful candidate will be expected to pursue research in nursing, to contribute to the teaching programme, and to be responsible for the supervision of research students. The post is full-time and for one year, with the possibility of extension for a second year. The salary will be in the range £11,175 - £13,725 p.a. (plus £1,175 p.a. for pension, £1,175 p.a. for gratuity, £1,175 p.a. for superannuation, £1,175 p.a. for housing, £1,175 p.a. for car, £1,175 p.a. for travel, £1,175 p.a. for other benefits).

For further details and an application form, to be returned by 5 May 1985, please contact the Personnel Officer, City of Birmingham Polytechnic, 114, Chase Side, London N16 9PN. Closing date 3 May 1985.

City of Birmingham Polytechnic

and West Midlands Regional Health Authority

Department of Health Sciences

Research Associate in Nursing Studies

(Principal Lecturer Scale)

Applications are invited for these posts from registered nurses with appropriate academic qualifications and experience in any area of nursing research.

The successful candidate will be expected to pursue research in nursing, to contribute to the teaching programme, and to be responsible for the supervision of research students.

The post is full-time and for one year, with the possibility of extension for a second year.

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City of Birmingham Polytechnic

and West Midlands Regional Health Authority

Department of Health Sciences

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City of Birmingham Polytechnic

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Research Associate in Nursing Studies

(Principal Lecturer Scale)

Applications are invited for these posts from registered nurses with appropriate academic qualifications and experience in any area of nursing research.

The successful candidate will be expected to pursue research in nursing, to contribute to the teaching programme, and to be responsible for the supervision of research students.

The post is full-time and for one year, with the possibility of extension for a second year.

The salary will be in the range £11,175 - £13,725 p.a. (plus £1,175 p.a. for pension, £1,175 p.a. for gratuity, £1,175 p.a. for superannuation, £1,175 p.a. for housing, £1,175 p.a. for car, £1,175 p.a. for travel, £1,175 p.a. for other benefits).

For further details and an application form, to be returned by 5 May 1985, please contact the Personnel Officer, City of Birmingham Polytechnic, 114, Chase Side, London N16 9PN. Closing date 3 May 1985.

City of Birmingham Polytechnic

and West Midlands Regional Health Authority

Department of Health Sciences

Research Associate in Nursing Studies

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City of Birmingham Polytechnic

and West Midlands Regional Health Authority

Department of Health Sciences

Research Associate in

Colleges and Institutes of Higher Education continued



For September 1985

Financial Accounting and Auditing

We are seeking a Senior Lecturer II/Senior Lecturer to teach to professional accountancy students at the higher levels. Applicants should preferably have been trained in the profession in a large firm of accounting and be relatively newly qualified with a relevant degree. Salary scale, inclusive of local allowance, £7,806-£14,319.

For details and application forms please send SAE to: The Vice-Principal, Slough College of Higher Education, Wellington Street, Slough SL1 1YG. Closing date 14 days.

An equal opportunities employer

Slough College

Christ Church College of Higher Education Canterbury

Department of Mathematics and Computing

Required for the beginning of the Autumn term 1985

LECTURER II/ SENIOR LECTURER

to assist with curriculum courses for initial and in-service teacher training courses in the Primary age range. Candidates must be well qualified and have substantial successful experience in teaching Mathematics in schools.

The college has approximately 100 students and offers B.A., B.Sc. and B.Ed. degrees, PGCE, advanced diploma and higher degrees in Education.

Salary scale: Lecturer II/ Senior Lecturer £7,548 - £14,061 p.a.

For further details write to:

Head of Department, Mathematics and Computing, Christ Church College, 100, The Quadrant, Canterbury, Kent, CT1 1JL. Tel: 01843 543433. Closing date 15 May 1985.



College of St. Mark & St. John

LECTURER II/SENIOR LECTURER IN RECREATION STUDIES (TOURISM)

Applications are invited from appropriately qualified persons for the above post, to contribute mainly to the B.A. Recreation and Community degree.

Particular consideration will be given to the ability to develop research and consultancy work in this field, and experience with a tourist agency would be an advantage.

Salary scale: Lecturer II/ Senior Lecturer £7,548 - £14,061 p.a.

For further details write to: Deputy Principal (P & R) College of St. Mark and St. John, Barrford Road, Plymouth, PL6 8BH. Tel: 01752 771181. Closing date Wednesday 8th May 1985.

Colleges and Institutes of Technology

DUNDEE COLLEGE OF TECHNOLOGY HEAD OF DEPARTMENT OF MATHEMATICS AND COMPUTER STUDIES

Resulting from the appointment of the present Head of Department to the Vice-Principalship of the College, applications are invited for the above post. The Department is responsible for teaching and research in Mathematics, Statistics, Operational Research, Computing and Information Technology and it offers a wide range of courses spanning these subject areas, including Degree courses validated by CNA.

The person appointed may be eligible for a professorship and applicants should have appropriate academic standing: they should have experience of teaching at Honours Degree level together with industrial and/or research experience; and they should also have a proven record of managerial ability. The salary (currently under review) is currently £19,785. Financial assistance towards the cost of removal expenses may be payable.

Further particulars and application forms are obtainable from the Principal, Dundee College of Technology, Bell Street, Dundee DD1 1HG, to whom completed application forms should be returned not later than 3rd May, 1985.

DUNDEE COLLEGE OF TECHNOLOGY Applications for the following posts in the Mathematics and Computer Studies Department are invited from persons who hold high academic qualifications and have appropriate teaching, research and/or industrial experience.

LECTURESHIPS IN COMPUTING (two posts)

A specialist interest in Data Processing, Artificial Intelligence, Software Engineering or Micro-machine interfaces would be an advantage.

LECTURESHIP IN STATISTICS

A specialist interest in Time Series, Multivariate Analysis, Statistical Computing or Econometric Modelling would be an advantage. Salary scale (currently under review): £9,888 - £19,777 (SAF) - £19,715, with initial grading depending upon approved previous experience. Financial assistance towards the cost of removal expenses may be payable. Further particulars and application forms may be obtained from the Personnel Officer, Dundee College of Technology, Bell Street, Dundee DD1 1HG, to whom completed applications should be sent not later than 3 May, 1985.

Somerset County Council BRIDGWATER COLLEGE SOMERSET AREA MANAGEMENT CENTRE (in association with Bristol Polytechnic)

Required as soon as possible:

Lecturer II in Management (Two Posts)

(Salary scale: Burnham Lecturer Grade II £7,548-£12,099)

Applicants should hold a degree or equivalent qualification and preferably a post-graduate qualification.

One post will be concerned with teaching Resource Management and requires expertise in teaching quantitative subjects, particularly financial management to managers and supervisors of post experience and post graduate level.

One post will be concerned with teaching human relations skills and organisation studies.

Candidates should have management experience and a practical interest and expertise in helping individuals manage their own learning, particularly through personal programmes of study and research.

Further particulars (SAE please) and application forms, returnable by 1 May 1985, from Principal, Bridgwater College, Bath Road, Bridgwater, Somerset TA6 4PZ.

(72573)

CENTRAL COUNCIL FOR EDUCATION AND TRAINING IN SOCIAL WORK

Two posts for Developmental Work

Salary up to £16,866 p.a. (inc. L.W.A.)

To join the Central Office Division responsible for development and liaison work in response to the changing demands of practice. One postholder will have a varied workload relating to client groups, services and settings. The other is likely, at least for a period, to be allocated responsibilities relating to development in training for care in the community, with particular reference to work with mentally handicapped people.

Previous employment in higher education will be an advantage. Candidates should be qualified and experienced in social work, or in a field relevant to work with mentally handicapped people. Secondment arrangements would be considered.

Informal enquiries to Hugh Barr or Elizabeth Wulf-Cochran (Ext. 225/8) will be welcomed. Further details and application form from Personnel Section, CCETSW, Derbyshire House, St. Chad's Street, London, WC1H 8AD. Telephone 01 276 2485 Ext. 238.

Completed applications should be received by: Friday, 10th May, 1985.

CCETSW

Administration continued

Portsmouth Polytechnic

FACULTY ADMINISTRATIVE OFFICER

An experienced administrator is required for this new appointment in the Faculty of Business, Economics, Education and Management, which has been created following the decision to establish a Faculty of resource management units. The role of the Faculty Administrative Officer is to relieve the Dean of Faculty of administrative aspects of faculty management, including financial, student and personnel matters.

Salary Scale: £9,477 - £11,052 per annum. (Assessment with relocation allowance available in approved cases).

Application forms and further particulars are available from: The Personnel Office, Portsmouth Polytechnic, Nuffield Centre, St. Michael's Road, Portsmouth PO1 3EP. Tel: Portsmouth (0705) 826451.

Please quote reference: Post Number 835.

Closing date for applications: 31st May 1985.

H18

Librarians

University of Cambridge

King's College

TEMPORARY ARCHIVE CATALOGUER

The College wishes to appoint a Temporary Archive Cataloguer for records of the College's activities and of its internal administration. To prepare their lists and index, with some sorting and re-boxing. Amongst qualifications likely to be of practical value are a degree in history, diploma in archive administration, some experience of handling medieval and modern estate records, and a working knowledge of Latin. Applicants must be able to work on their own under general direction from the part-time College Archivist.

Appointment preferably for one year from mid-September 1985 at a salary of around £7,000 per annum, but part-time appointment for two years might be considered.

Applications, with names of two referees, to the first instance, the Assistant Secretary, King's College, Cambridge CB2 1R7 by the end of May, (043177).

Courses

The University of Buckingham

POSTGRADUATE COURSES

Britain's only independent university offers the following postgraduate opportunities starting January 1986:

- *MSc in Fisheries Biology.
- *MSc in Public Sector Studies.
- *MA or Diploma in European Studies: Tocqueville and his Times.
- *MA or Diploma in Comparative Literature.
- *Diploma in 18th and 19th Century Historical Studies (starts October 1985).

For details of these and postgraduate research opportunities and undergraduate degree programmes in Accounting, Business, Economics, Law, Humanities and Life Sciences complete the coupon below or telephone Buckingham (0280) 814080. The Admissions Officer, The University of Buckingham, Buckingham MK18 1EG.

Please send me details of postgraduate study in:

Name:

Address:

THS154

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THE OPEN UNIVERSITY

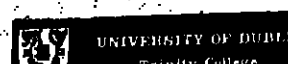
PART-TIME M.Sc. IN ADVANCED EDUCATIONAL AND SOCIAL RESEARCH METHODS

Applications are invited for a two year, part-time external course leading to the Open University higher degree of M.Sc. The course covers the main lines of educational and social research methods and their philosophical basis, and aims, by distance teaching, project work and a dissertation to equip students to analyse and report on research data, critically evaluate published educational and social research findings and to develop further lines of research.

The course is open to applicants in any part of the United Kingdom. In the first year, students will draw on a number of teaching resources, including correspondence texts, TV and cassette programmes, computer programs, optional tutorials and project guides and will study a number of set books in one option from a range of social science and education disciplines. In the second year, students will complete the study of set texts and will undertake a supervised dissertation.

Applicants should normally have at least an upper second class honours degree in, or including, education or the social sciences. For application forms and further particulars please send a POSTCARD to The Higher Degrees Office, P.O. Box 48, Milton Keynes, MK7 8AD. Telephone: Milton Keynes (0908) 855906; please quote reference (TB3). The closing date for applications is 30th May 1985.

(72595)



UNIVERSITY OF DUBLIN Trinity College

MASTER'S COURSE IN REFORMATION AND ENLIGHTENMENT STUDIES (M.Phil. degree)

A course in Reformation and Enlightenment Studies will be offered in the academic year 1985/86. The course is intended as an introduction to well-qualified students to research problems and methods in intellectual and religious history, drawing on the resources of Dublin libraries and current self-research interests.

The course lasts for one calendar year and requires full-time study.

Enquiries should be addressed to: Graduate Studies Office, Trinity College, Dublin 2.

The closing date for receipt of completed applications is 1st June 1985.

The University of Leeds

Department of German Language and Literature

M.A. IN ANGLO-GERMAN LITERARY RELATIONS

Applications are invited for admission to the above new one-year course commencing 1 September 1985.

This course, based on lectures and seminars, explores the main literary cross-currents between Britain and Germany since 1700 and examines some of the questions relating to literary translations. Applicants should hold a good honours degree in German, or in a combination of subjects including German.

The course may also be taken part-time over a period of two years.

Further details and application forms may be obtained from the Postgraduate Admissions Office, Department of German Language and Literature, University of Leeds, Leeds LS2 9JT. (0532) 751523.

Overseas

University College of Arts, Science and Education, Bahrain, invites applications for academic posts at various levels in the following areas of specialization:

- Arabic: Arabic grammar.
- Islamic Studies: Koranic Studies (Al-Tafsir)
- Chemistry: Inorganic Chemistry.
- Education: Curriculum & Methods of Teaching Arabic/Islamic Studies; Measurement & Educational Evaluation; Curriculum & Methods of Teaching (with special emphasis on Primary Education); Curriculum & Methods of Teaching Social Studies (History & Geography).
- English: TEFL (postgraduate qualification in TEFL and at least five years experience in language teaching required).
- Mathematics: Computer Science & Computing; Statistics; Applied Mathematics; Algebra.
- Physical Education: Sports Psychology; Physiology of Exercise; Adaptive P.E.
- Physics: Experimental Solid State Physics; Experimental Astronomy and Astrophysics.
- Psychology: Learning & Memory; Childhood & Adjustment; Human Abilities & Traits.

Applicants in the specializations listed under Arabic, Islamic Studies, Education, Physical Education, Psychology MUST be holders of a Ph.D. or equivalent research degree from a recognized university and have suitable teaching experience. Appointees may have to teach lower level courses in any specialization within the subject.

The contract will be for two years renewable and offers the following benefits: suitable accommodation — free medical services within the State system for the appointee and dependent family — economy air tickets for the appointee, spouse and up to 3 dependent children under 18 years of age, for travel to and from Bahrain, including summer vacation — one additional month's salary for each year completed at UCB — allowance for shipment of personal effects, etc.

Salary Scales for various academic ranks are as follows:

- Professor: BD.950 per month with 8 steps of BD.50 each
- Associate Professor: BD.775 per month with 8 steps of BD.25 each
- Assistant Professor: BD.675 per month with 8 steps of BD.25 each

One Bahraini Dinar = Stg £2.17, US \$2.65 approx. There is no income tax in Bahrain.

Applications should be addressed to the Rector, University College of Bahrain, P.O. Box 1082, Bahrain, citing three referees and passport details of entire family.

Deadline for receipt of applications: 3 weeks from the date of this publication.

(7256)

Awards

THE GUILD OF ST. GEORGE Founded by John Ruskin ACADEMIC AWARDS 1985-86 ASPECTS OF RUSKIN

Applications are invited for research funding in the wide field of natural sciences, agricultural economics, sociology, history and arts associated with Ruskin. Preference will be given to candidates wishing to study at the Ruskin Gallery, Sheffield (to be opened in May) or the Bambergo Gallery, I.O.W.

Particulars are available on receipt of a.s.a. from J.P. Cordery, Secretary, Hope Orchard, Castlemorton, nr. Malvern, Worcs. WR13 6JB.

Closing date for return of applications: May 17th 1985.

(72588)

Secondary Education

ST. PAUL'S SCHOOL

HEADSHIP

The Governors of St. Paul's School invite applications for the above post for September 1986 following the retirement of the High Master, Mr J. W. Hele.

Details of the post and method of application may be obtained from the Clerk to the Governors of St. Paul's School, Mercers' Hall, Ironmonger Lane, London, EC2V 8HE.

(72670)

Holidays and Accommodation

BRISCOLL HOUSE HOTEL, 808, Whitechapel Road, E1 1BB. Tel: 01 735 1155.

Miscellaneous

TURNER ENGRAVINGS BY THE ARTIST, 10, Abchurch Lane, London EC4N 3DF. Tel: 01 403 9121.

Adult Education

WEA

WORKERS' EDUCATIONAL ASSOCIATION

ASSISTANT SECRETARY

Salary Scale: £12,609-£14,313 (under review) (plus London Allowance: £1,258)

Applications are invited for the post of Assistant Secretary in the WEA National Office based in London.

Applicants should have experience of adult education and an understanding of the objectives of the WEA. Particular experience of in-service training, women's education, or curriculum development for adults would be an advantage.

The post is for three years in the first instance. Application forms are available from the General Secretary, WEA, Temple House, 9 Upper Berkeley Street, London W1H 8BY. Tel No: (01) 402 5808.

Closing date for receipt of applications: 3rd May 1985.

The WEA is an Equal Opportunities Employer

(72591)

Administration

CHIEF ADMINISTRATIVE OFFICER

The London Borough of Enfield will establish a new college of further education on 1st September 1985 based in part on the existing courses offered by the Edmonton College of Further Education but with a wider role than the existing college which it will replace.

The Chief Administrative Officer together with the Principal and Vice Principal will have the central executive responsibility for the college including general management, finance, external relations, staffing and allocation of resources. The Chief Administrative Officer will be responsible for the planning and implementation of the transfer of administrative, clerical and other ancillary support services.

Candidates should have a proven record of successful administrative and management experience, and ability to motivate colleagues, qualities of thoroughness and diligence and some knowledge of further education would be an advantage.

The post is graded POE on a salary scale of £11,268 to £12,243 plus £867 per annum London Weighting.

Further information and application form available from Education Establishment Section, P.O. Box 56, Civic Centre, Silver Street, Enfield EN1 3XQ.

London Borough of

Enfield

An Equal Opportunities Employer

Overseas continued

UNIVERSITY OF PORT HARCOURT PORT HARCOURT ACADEMIC STAFF VACANCIES

Applications are invited from suitably qualified candidates to fill the following vacant positions in the University of Port Harcourt.

1) Faculty of Humanities

Senior Lecturer (In Applied Linguistics)
Lecturer/II (In Applied Linguistics; Epistemology/Logic; Philosophy of Science)
Assistant Lecturer (In Philosophy of Social Science/Social and Political Philosophy; Philosophy of Science)

2) Faculty of Social Sciences

Professor/Reader (In Social Work)
Senior Lecturer (In Geomorphology & Hydrology; Public Administration/Political Theory)
Lecturer/II (In Industrial Economics; Climatology/Meteorology; Social Work)

3) Faculty of Science

Professor/Reader (In Geology - Geochemistry; Pure Mathematics)
Senior Lecturer (In Biometry; Industrial Chemistry; Material Science)
Lecturer I (In Industrial Chemistry)

4) Faculty of Education

Professor (In Educational Administration; Educational Psychology; Curriculum Development)
Senior Lecturer (In Educational Planning/Economics of Education/Administration of Higher Education; Sociology of Education)
Lecturer/II (In Comparative Education; Physical Science Methods; Guidance & Counselling)

5) Faculty of Engineering

Professor/Reader (In Civil Engineering; Mechanical Engineering)
Reader/Senior Lecturer (In Petroleum Engineering)
Senior Lecturer (In Electrical Engineering)
Lecturer/II (In Electrical Engineering)

6) College of Health Sciences

Professor/Reader (In Anaesthesiology; Medical Microbiology; Pharmacology; Psychiatry; Paediatrics; Radiology; General Surgery)
Reader/Senior Lecturer (In Clinical Haematology; Anatomy - Physical Anthropology)
Senior Lecturer (In Anaesthesiology; Anatomy - Cell Biology; Paediatrics; Physiology; Preventive and Social Medicine; Obstetrics and Gynaecology; E.N.T.; Ophthalmology)
Lecturer/II (In Anaesthesiology; Chemical Pathology; Physiology)

7) Faculty of Management Science

Professor/Reader (In Accounting; Finance)
Senior Lecturer (In Accounting; Finance; Information Systems and Data Processing; Quantitative Methods for Business; Marketing)
Lecturer/II (In Accounting)

Condition of Service

Conditions of service are as applicable to the Federal Public Service and as appropriate in the Nigerian Universities System.

University System Scale

Professor US\$ 15 - N14280 x 720 - N15720
Reader US\$ 14 - N12732 x 660 - N15372
Senior Lecturer US\$ 13a - N11384 x 576 - N14820
Lecturer I US\$ 11 - N9,000 x 360 - N10080
Lecturer II US\$ 9 - N7,560 x 288 - N9,040
Assistant Lecturer US\$ 8 - N6,336 x 192 - N7,488

Applicants for position in the College of Health Sciences must possess a first medical degree registrable in the United Kingdom.

Applicants are invited to submit three copies of applications and curriculum vitae, indicating telephone number, passport number, date and place of birth, nationality, permanent and current address and number of dependants, academic and professional qualifications obtained with dates and one set of photo-copies of certificates and relevant documents. Previous employer, and post held with dates, indicating detailed working experience. Present employer, post and salary including detailed schedule of work. Detailed list of publications and research if any, with dates and names of journals, the names and addresses of three referees who know you professionally.

Candidates resident in Europe and the United Kingdom should send their application not later than 24th May 1985 to: The Education Attaché, Nigeria High Commission, Education Division, 180 Tottenham Court Road, London W1P 0LE.

In the United States of America and Canada: The Education Attaché, Nigeria Embassy, 2010 Massachusetts Avenue N.W., Fourth Floor, Washington D.C. 20006.

Please request references to send their references to the appropriate Office.

(72879)

Overseas Appointments Kenya

The Kenyan Ministry of Education, Science and Technology require the services of the following to be based at the Kenya National Examinations Council, Nairobi:

Systems Analyst

To assist with the planning and implementation of systems projects in public examinations and to liaise with the Council's research section. Responsibilities will also include the identifying of new projects, management of programming staff and in-house training for local staff.

Applicants should have an appropriate degree, and have considerable programming experience in both COBOL and FORTRAN in an examination processing environment or related fields. Experience is also desirable in statistical analysis together with knowledge of ICL hardware and software.

Research Secretary (Biological Sciences)

Responsible to the Head of the Research Section for carrying out functional research into the examination of biological sciences, including the analysis of performance and the writing of feedback documents.

There may also be a requirement to look into aspects such as subject pair comparisons to determine the relative difficulty of examination papers and therefore the comparability of grades awarded. Research will also be carried out on the validity, reliability and efficiency of the Council's examinations and the factors affecting overall performance.

Applicants should be qualified teachers with a post graduate degree in biological sciences, and have at least three years teaching experience to 'O' and 'A' level, together with proven experience in carrying out research involving the use of statistics. Participation in the setting, moderation or marking of public examinations will be an added advantage.

Both appointments are on contract to the Government of Kenya for one year of 30 months in the first instance with options for one year extensions by mutual agreement. Applicants should be British Citizens, under 60 years of age. Local salaries are in the range K2284 pa to K2828 pa, plus a tax free supplement payable by ODA, in the range £1180 pa to £1402 pa. Other benefits include free passages, children's education allowances and subsidised accommodation. A terminal gratuity of 28% of local salary may also be payable on satisfactory completion of contract.

Exchange rate as at 19 March 1985 - £1 stg. = 1789 Kenya Shillings (20 Kenya shillings = 1K£).

For full details and application forms, please apply within 21 days, quoting ref. AH309/IF/TES, stating post concerned and giving details of age, qualifications and experience to: Appointments Officer, Overseas Development Administration, Room 381, Abercrombie House, Eaglesham Road, EAST KILBRIDE, Glasgow G78 8EA.

OVERSEAS ODA DEVELOPMENT Britain helping nations to help themselves

MOI UNIVERSITY

APPLICATIONS are being invited from qualified, full-professors to join the following faculties:

1. INFORMATION SCIENCE.
2. SOCIAL, CULTURAL AND DEVELOPMENT STUDIES.
3. SCIENCE.
4. TECHNOLOGY.
5. VETERINARY MEDICINE.
6. AGRICULTURE.
7. EDUCATION.

Candidates should be distinguished scholars with wide teaching and research experience at university level. Applicants should have an earned doctorate, demonstrated administrative competence, a proven record of professional accomplishments, and a commitment to academic excellence. Preference will be given to those who have demonstrated outstanding performance in their respective disciplines.

The successful candidate will be required to teach and supervise research at both the under-graduate and post-graduate levels. He will also be expected to initiate and assist in the development of his own faculty, and provide effective leadership in the development of academic programmes in his own faculty.

Salary: Not less than £5,940 p.a.

In addition to the salary, these post carry an attractive housing allowance or subsidised housing in lieu, non-contributory medical scheme, generous leave and other fringe benefits.

Applications Process: Applications (in triplicate) with full curriculum vitae including the names and addresses of three referees and copies of certificates should be made to:

The Chief Academic Officer,
Moi University
P.O. Box 3900
ELDORET
KENYA

Overseas continued

Technical Education Posts Overseas

Botswana Polytechnic

Senior Lecturer in Supervisory Studies and Management (Technical)

Duties: to administer as Head of Section the Supervisory Studies Unit of the Polytechnic; to identify the needs of industry in Botswana for courses in Technical Supervision and Management; to develop suitable training programmes and identify the resources required; to teach up to 18 hours per week in Management and Supervisory Studies, in subjects such as Industrial Organisation, Production Management, Principles of Supervision etc.

Qualifications: candidates, preferably aged 35-55, should possess a degree or professional qualification preferably in an engineering field; membership of a professional body concerned with aspects of management; at least five years' industrial/management experience; at least eight years' teaching experience. Candidates must be UK citizens with a British educational background. Salary: a basic salary paid locally by the Government of Botswana on a scale ranging from Pula 12,264-15,064 (£1 - P2.09 approx.) plus a normally tax free supplement paid by the British Government under its aid programme, ranging from £3,468-£7,280 subject to marital status and point of entry on salary scale. Benefits: end of contract gratuity payment, free air passages for officer and dependant family members plus baggage allowance. Officers may also be eligible for children's boarding school allowances and holiday visits. Contract initially for 30-36 months with the Government of Botswana, starting September 1985 latest. Closing date for applications: 10 May 1985. References: 85 X 1.

For further details and an application form, please write, quoting the post reference number to: Overseas Educational Appointments Department, The British Council, 90-91 Tottenham Court Road, London W1P 0DT.

The British Council

DEPARTMENT OF HISTORY

Applications are invited from suitably qualified candidates for the post of:

Lecturer in Archaeology

within the Department of History.

Candidates should preferably have a Ph.D. in African Archaeology, or Prehistory with research and teaching experience in the prehistory and archaeology of the Southern African region. The successful candidate will initially be responsible for teaching the prehistory sections of existing history department courses on Africa, Southern Africa and Botswana. He or she will also be responsible for advising the Department on the building up of an Archaeology Unit within the Department for the teaching of, and research in the Prehistory and Archaeology of the region at both Diploma and Degree levels.

Closing date: April 30, 1985.

SALARY: Lecturer, P8,668-16,368 p.a.

Fringe benefits for expatriates: 25% gratuity and 30% contract addition and education allowance for children.

Applications should be addressed to the Assistant Registrar (Staffing), University of Botswana, Private Bag 0022, Gaborone, Botswana.

(72880)

THE HEBREW UNIVERSITY OF JERUSALEM APPOINTMENT OF RUSSIAN LITERATURE

The Hebrew University of Jerusalem wishes to make a tenure track Appointment in the Faculty of Letters. The successful candidate will be expected to assume the position of Professor of Russian Literature and to teach and supervise research in the field. The successful candidate should have a Ph.D. in Russian Literature, a proven record of professional accomplishments, and a commitment to academic excellence. Preference will be given to those who have demonstrated outstanding performance in their respective disciplines.

UNIVERSITY OF BOTSWANA

Department of Library Studies invites applications for a post of Lecturer/Senior Lecturer to commence in August 1985. A suitable candidate must have a Masters degree in Library Information Science. Previous teaching experience in an established Library Studies programme is preferred. Practical experience in, or a definite commitment to the initiative and development of computer/data base aspects of the Department's future programme is essential.

Applicants should clearly state the teaching areas they have competence/experience in, as well as the areas they would prefer to take up.

Salary: Lecturer P8,668-P16,368;

Senior Lecturer P16,804-P18,072.

Benefits: expatriate appointees will get 30% contract addition and 25% terminal gratuity on completion of each two year contract. Baggage and education allowances as well as a car loan and medical aid schemes.

Apply to Assistant Registrar (Staffing) University of Botswana, Private Bag 0022, Gaborone, Botswana not later than April 30, 1985.

(72785)

Research and Studentships

University of Durham

Department of Theology with the Computer Centre

RESEARCH FELLOW

Applications are invited for the post of Research Fellow in the Department of Theology, Durham University, for a period of two years from 1st September 1985 to direct a project funded by the Computer Centre for the study of the Bible. The Research Fellow will be responsible for the teaching of New Testament Greek and (in due course) of biblical Hebrew. Candidates should have a good honours degree or equivalent in relevant subject, a working knowledge of New Testament Greek and some familiarity with programming techniques.

The initial salary will be at an appropriate point on the A scale for Research and Academic Staff, Durham University, £11,500. Further particulars may be obtained from the Registrar and Secretary, University of Durham, Old Shire Hall, 101-103, Durham City, DH1 1TA. Applications should be returned not later than 10 May 1985.

H11

University of Kent at Canterbury

Computing Laboratory
Research on
Computer-Based
Document
Preparation

SENIOR RESEARCH FELLOW IN COMPUTER SCIENCE TWO RESEARCH FELLOWS IN COMPUTER SCIENCE

Applications are invited for the above posts to work on a collaborative project to develop a 'Document Analysis Support System for Software Engineers'. The project is based on the use of workstations, with high-resolution graphics, and laser printers. It aims to develop an integrated system for the interactive creation of documents containing text, graphics and tables. The University's contribution to the project will be primarily in the area of document structures, interactive formatting strategies, and the integration of text, graphics, and images.

The project will be an exciting opportunity to work on a new project in a rapidly expanding area of research. The successful candidate will be expected to take charge of the project and to liaise with the University's contribution to the project.

Applicants should have a good software background. A knowledge of computer graphics, workstations, and laser printers would be an advantage. The successful candidate will be expected to start from September 1985 and to work full-time on the project.

Salary: £11,500 - £14,500 p.a. (Research Fellow); £14,500 - £17,500 p.a. (Senior Research Fellow).

Further details are available from the Registrar, University of Kent, Canterbury, Kent, CT2 7AL.

Closing date for applications: 10 May 1985.

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University of Botswana

Applications are invited for the post of:

LECTURER IN ADULT EDUCATION

to teach adult education courses on the Institute of Adult Education. The Institute is a non-profit-making organization, established in 1974, to provide adult education and training. Applicants should have a M.A. or Ph.D. in adult education and experience in training adult educators in developing countries. Preference will be given to applicants with experience in the psychology of adult education.

Salary: P8,568 - P16,368 p.a.

Closing date: May 3rd, 1985.

Applications with names and addresses of three academic referees should be sent to the Assistant Registrar (Staffing), Private Bag 0022, Gaborone, Botswana. (54328)

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YORK UNIVERSITY Toronto, Canada Vice-President (Academic Affairs)

Applications and nominations are invited for the position of Vice-President (Academic Affairs).

The incumbent is responsible to the President for the development, co-ordination and maintenance of standards of excellence in the academic programmes of the University; the planning, budgeting, and recommendations for the allocation of all academic programme resources; reviewing proposals to initiate the search for new faculty, establishing priorities amongst such proposals and for the integrity and effectiveness of search procedures; recommending all academic appointments, leaves, and terminations; helping to initiate, integrate and monitor the implementation of academic programmes approved by the University Senate.

Qualifications for the position include demonstrated excellence in scholarship, considerable administrative skill with a record of sound decision-making, and familiarity with Canadian education policies.

York University is a publicly supported institution established in 1959. Undergraduate and postgraduate degree programmes are offered through ten faculties. York has a full-time faculty of 1,100, and full-time enrolment equivalents of 24,000 undergraduate and 2,200 graduate students.

The appointment will be made for an initial period of five years, beginning January 1, 1986. Salary will depend on qualifications and is negotiable. Applications and nominations will be received until May 15, 1985.

Please address application or nomination, together with curriculum vitae, to:

The Secretary, Search Committee for the Vice-President (Academic Affairs), York University, Room 222D, Osgoode Hall Law School, 4700 Keele Street, North York, Ontario, Canada M3J 2R5.

In accordance with Canadian immigration requirements, priority will be given to Canadian citizens for this position. The University of York is an equal opportunity institution.